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UCRL-50400 Volume 7
Part B

**An Integrated System for Production
of Neutronics and Photonics Calculational Constants
Volume 7 Part B**

**GRAPHICAL, EXPERIMENTAL DATA
FOR MAJOR NEUTRON-INDUCED INTERACTIONS ($Z > 55$)**

D. E. Cullen, R. C. Haight, R. J. Howerton,
M. H. MacGregor, and S. T. Perkins

April 1, 1974

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Foreword

The UCRL-50400 series describes an integrated and computer-oriented system for the production and application of neutronics and photonics calculational constants.

The system must supply reliable up-to-date data, select specific types of data on request, provide output in a variety of forms — ultimately in the form of input to other computer codes, and function rapidly and efficiently. The system has now been developed to a point where these goals are being realized.

The UCRL-50400 series, An Integrated System for Production of Neutronics and Photonics Calculational Constants, comprises the following volumes:

- Vol. 1, ECSIL, A System for Storage, Retrieval and Display of Experimental Neutron Data, March 1974.
- Vol. 2, A Bibliography of the Experimental Data of Neutron-Induced Interactions, March 1974.
- Vol. 3, An Index of the Experimental Data of Neutron-Induced Interactions, March 1974.
- Vol. 4, Evaluated Nuclear Cross-Section Library, April 1971.
- Vol. 5, CLYDE: A Nuclear Data-Processing Computer Program for

Producing Calculational Constants, May 1971.

- Vol. 6, Photon Cross Sections 1 keV to 100 MeV, October 1968.
- Vol. 7, Graphical Experimental Data for Major Neutron-Induced Interactions, April 1974.
- Vol. 8, Graphical Experimental Data for Supplemental Neutron-Induced Interactions, to be published.
- Vol. 9, Thresholds of Nuclear Reactions Induced by Neutrons, Photons, Deuterons, Tritons, and Alpha Particles, September 1970.
- Vol. 10, Tabulated Experimental Data for Neutron-Induced Interactions, May 1974.
- Vol. 11, Experimental Data, Indexes and Techniques of Obtaining a Selected Set of Neutron Resonance Parameters, May 1972.
- Vol. 12, An Atlas of Resolved Neutron Resonance Parameters, July 1972.
- Vol. 13, An Atlas of Unresolved Neutron Resonance Parameters, September 1972.
- Vol. 14, TARTNP: A Coupled Neutron-Photon Monte Carlo Transport Code, June 1974.

GRAPHICAL, EXPERIMENTAL DATA FOR MAJOR NEUTRON-INDUCED INTERACTIONS

Abstract

The total, elastic, capture and fission cross sections, contained in the Experimental Cross Section Information Library (ECSIL) as of March 1, 1974, are presented in graphical form. For the sake of clarity, these data are plot-

ted without associated error bars. The plots are arranged in ascending order of atomic number (Z) and atomic weight (A). Part A contains the plots for $Z = 1$ to 55, and Part B contains the plots for $Z > 55$.

Introduction

In 1958, a computerized system for the storage and retrieval of experimental neutron-interaction data was installed at Lawrence Livermore Laboratory. The system has developed gradually and it is still being improved.

The present system¹ is made up of two separate files: A numeric data file and a bibliographic information file. The two files are linked through the use of a four digit number which is uniquely assigned to each reference.

In 1959 and 1960, tabulations of integrated and differential neutron cross sections below 15 MeV were published.

Since that time the number of entries in the system has increased by more than an order of magnitude. Consequently, there is too much data in the current library (almost one million data points) to publish tabulations of this information; the resulting volumes would be prohibitively expensive and bulky. However, by presenting the data in graphs² and on microfiche,³ we can significantly reduce the expense and the bulk.

Moreover, the reduction in bulk means that indexes⁴ and bibliographies can be added to help in the manipulation of the data.

Graphical Data

Volumes 7 and 8 present graphs of all cross sections* contained in ECSIL.

*As opposed to angular distributions and energy distributions.

Volume 7 consists primarily of interactions where a single data set contains enough points to show cross section behavior. Volume 8 consists of interactions

where more than one data set is needed to show cross section behavior. Thus, the total, elastic, capture and fission cross sections; and the parameters $\bar{\nu}$, α and η are found in vol. 7. All other reactions are in vol. 8.

The present ECSIL library contains 985 158 points, of which 823 508 points are cross sections. Of these points 790 694 (over 96%) are total, elastic, capture, fission, $\bar{\nu}$, α or η and are, therefore, contained in vol. 7. The remaining 32 814 points are contained in vol. 8. Although vol. 7 contains the vast majority of the data points, the division of data sets between the two volumes is more equitable: 4612 in vol. 7, and 4113 in vol. 8.

In this volume each data set is plotted separately. The plots are arranged in ascending atomic number (Z) and atomic weight (A) (see ECSIL conventions for compounds and special materials). Within each material the reactions are

arranged in the order: total, elastic, fission, capture, $\bar{\nu}$, α , and η . For each reaction, the plots are arranged in ascending least energy order (identical to the order in the data indexes, vol. 3). The reference number and year of the reference appear to the left of each plot (e.g., ECSIL-3327 (68) indicates ECSIL reference number 3327 and that the reference is dated 1968).

Any reference that contains a large number of points is first plotted as a single entity and is then followed by a number of subplots that slightly overlap in energy. Each subplot is chosen to contain an acceptable number of data points.

Any reference that contains less than four points is not plotted. Points from these references are listed at the end of each material (ZA) in the following order: total, elastic, fission, capture, $\bar{\nu}$, α , and η . Within each reaction they are listed by ascending incident energy.

Relationship to Other Volumes

This volume is closely related to other volumes in the UCRL-50400 series and can be used to determine whether experimental data are available for a given target and reaction. The following volumes provide other paths to the information:

Volume 1 describes the format and conventions associated with the

A data set in this context is the data from a given reference, for a single target and reaction.

library, as well as the supporting system of programs. The forms (e.g., plots and listings) and the order in which data and bibliographic information may be obtained are also given.

Volume 2 contains bibliographic indexes that can be used to determine whether a specific reference is included in the ECSIL system, and which experimental data are associated with the reference.

Volume 3 lists data indexes that may be used to determine the data in the library for a given isotope or reaction.

Volume 8 is a graphical presentation of all other integrated (as opposed to angular distribution) cross sections, including (N,N') and (N,α) , etc.

Volume 10 contains the integrated cross sections tabulated on microfiche.

Volume 11 lists the indexes and tabulated resonance parameters contained in ECSIL.

Volume 12 lists selected tabulated resolved resonance parameters.

Volume 13 lists selected tabulated unresolved resonance parameters.

Acknowledgments

We gratefully acknowledge the cooperation we have received from the National Neutron Cross Section Center at Brookhaven National Laboratory; the ENEA Center for collection of neutron data at Saclay; the IAEA Nuclear Data Section at Vienna; and the Nuclear Data Section at Vienna. The National Neutron Cross Section Center has routinely supplied us with experimental data collected at the four centers.

Many experimenters have furnished us with their data in advance of publication. To them, especially, we offer our grateful thanks. Finally, we would like to express our sincere gratitude to Mrs. Violet Gamble for her effort in maintaining the bibliographic file and to Mr. Kenneth Hill for insuring that the numerous computer runs were satisfactorily completed.

References

1. D. E. Cullen, R. C. Haight, R. J. Howerton, M. H. MacGregor, and S. T. Perkins, ECSIL, A System for Storage, Retrieval and Display of Experimental Data, Lawrence Livermore Laboratory, Rept. UCRL-50400, Vol. 1, March 1974.
2. D. E. Cullen, R. C. Haight, R. J. Howerton, M. H. MacGregor, and S. T. Perkins, Graphical Experimental Data for Supplemental Neutron-Induced Interactions, Lawrence Livermore Laboratory, Rept. UCRL-50400, Vol. 8, to be published.
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4. S. T. Perkins, D. E. Cullen, R. C. Haight, R. J. Howerton, and M. H. MacGregor, An Index to the Experimental Data of Neutron-Induced Interactions, Lawrence Livermore Laboratory, Rept. UCRL-50400, Vol. 3, March 1974.
5. S. T. Perkins, D. E. Cullen, R. C. Haight, R. J. Howerton, and M. H. MacGregor, A Bibliography of the Experimental Data of Neutron-Induced Interactions, Lawrence Livermore Laboratory, Rept. UCRL-50400, Vol. 2, March 1974.

ECSIL Conventions

The ECSIL Data System describes experimental neutron-induced cross sections and related information by indicating:

- **Target** – The ZA number is used to describe the target. There are several special conventions. For example, A is set equal to zero for elemental mixtures. For compounds, the Z of the element that appears first in the molecular formula is used, and A is defined as 300 plus the molecular weight (e.g., H_2O is assigned $Z = 1$ and $A = 318$). For unstable targets, the longest-lived isomer is assigned to the ZA of the target; short lived isomers are assigned the Z of the target, and A is defined as 600 plus the A of the target (e.g., ^{242g}Am is assigned $Z = 95$ and $A = 842$). See Table 1 for complete list of compounds and special isotopes.
- **Interaction** – A numerical equivalent is used to designate the interaction: total, elastic, capture, etc. In ECSIL this numerical equivalent is referred to as the basic C number. Table 2 gives a complete list of all basic C numbers.
- **Interaction Property** – A numerical equivalent designates the interaction properties that are measured, such as cross section, angular distribution, or energy distribution. In ECSIL this numerical equivalent is referred to as the C increment number. The total C number used to describe the interaction and its property is the sum of the C number increment and the basic C number [e.g., 11 indicates the total (N,N') cross section, whereas 311 indicates the (N,N') secondary neutron energy spectrum]. Table 3 gives a complete list of all C number increments. Table 4 lists miscellaneous quantities that are not included in the basic C, C increment scheme.
- **Interaction Modifier** – A numerical equivalent is used to further qualify or describe the interaction. This quantity indicates conditions such as target temperature, the cross section for excitation of one or more levels of the residual nucleus, and the cross section for production of one or more photons. In ECSIL this numerical equivalent is referred to as the S number. Table 5 gives a complete list of all S numbers.

Table 1. Compounds and special isotopes
(Assigned ZA's).

Assigned ZA	Material	Assigned ZA	Material
1302	H ₂ (gas)	14360	SiO ₂
1308	H ₂ O	16364	SO ₂
1320	D ₂ O	22349	TiH _{0.6}
5370	B ₂ O ₃	22350	TiH _{1.9}
6328	C ₂ H ₄	26460	Fe ₂ O ₃
6331	CH ₃ OH	27660	60mCo
6376	C ₆ H ₆	40391	ZrH _{0.63}
6384	C ₆ H ₁₂	40392	ZrH _{0.98}
6386	C ₆ H ₁₄	40393	ZrH _{1.5}
6392	C ₃ H ₈ O ₃	40394	ZrH _{1.98}
6404	C ₈ H ₈	40423	ZrO ₂
6652	C ₂₅ H ₅₂	60636	Nd ₂ O ₃
7328	N ₂ (gas)	61748	148gPm
7353	NH ₄ Cl	82999	RADIO-Pb
7398	NH ₄ Br	92570	UO ₂
7445	NH ₄ I	95842	242gAm
8332	O ₂ (gas)	95844	244gAm
12340	MgO	99854	254mEs
13402	Al ₂ O ₃		

Table 2. Basic reaction designator (basic C).

Basic C	Cross section type	Basic C	Cross section type
1	Total	26	(N,P)
2	Elastic	27	(N,XP)
3	Nonelastic	28	(N,D)
4	Neutron emission (elastic + nonelastic)	29	(N,XD)
5	Total scattering (inelastic + elastic)	30	(N,T)
6	Neutron nonelastic emission	31	(N,XT)
7	Removal	32	(N, ³ He)
8	—	33	(N,X ³ He)
9	—	34	(N, α)
10	—	35	(N,X α)
11	(N,N')	36	Activation
12	(N,2N)	37	(N,2 α)
13	(N,3N)	38	—
14	(N,N'P)	39	—
15	(N,N'D)	40	—
16	(N,N'T)	41	Bound atom
17	(N,N', ³ He)	42	Free atom
18	(N,N', α)	43	Coherent scattering
19	(N,4N)	44	Incoherent scattering
20	—	45	—
21	Absorption	46	$\bar{\nu}_p$ prompt neutrons per fission (average)
22	(N,fission)	47	$\bar{\nu}_d$ delayed neutrons per fission (average)
23	(N, γ)	48	η , neutrons produced per non- elastic
24	(N,X γ) gamma-ray production	40	α , capture-to-fission ratio
25	(N,X) charged-particle emission		

Table 3. Reaction designator increments (C increment).

C increment	Reaction property (units)	Definition
0	Integrated cross sections (barns), or related parameters	σ
50	Spectrum-averaged cross section (barns)	$\bar{\sigma}$
100 ^a	Angular distributions (barns/steradian)	$\sigma(E, \theta)$
200	Energy distributions (barns/MeV)	$\sigma(E, E')$
250	Angular distributions integrated between fixed angular limits (barns)	$\sigma(E, \theta_{\min}, \theta_{\max})_{\text{lab}}$
300	Differential energy distributions (barns/steradian MeV)	$\sigma(E, E', \theta)_{\text{lab}}$
350	Partial distributions integrated between fixed energy and angular limits (barns)	$\sigma(E, E'_{\min}, E'_{\max}, \theta_{\min}, \theta_{\max})_{\text{lab}}$
400	Energy distributions integrated between fixed energy limits (barns)	$\sigma(E, E'_{\min}, E'_{\max})$
450 ^a	Legendre expansion of angular distributions - $g_l(E)$ (dimensionless)	$\sigma(E, \theta) = \sigma(E) \sum_{l=0}^{\infty} \frac{2l+1}{4\pi} g_l(E) P_l(\cos \theta)$
500	Resonance integrals (barns)	$R.I. = \int_{E_{\min}}^{E_{\max}} \sigma(E) \frac{dE}{E}$
550 ^a	Polarization (dimensionless)	$P(E, \theta)$
600	Partial distributions integrated between fixed-energy limits (barns/steradian)	$\sigma(E, E'_{\min}, E'_{\max}, \theta)_{\text{lab}}$
650	Partial distributions integrated between fixed angular limits (barns/MeV)	$\sigma(E, E', \theta_{\min}, \theta_{\max})_{\text{lab}}$
800	C/S ratios (dimensionless)	
900	Miscellaneous quantities	See: Table 4

^a Angular distributions for all unique two-body reactions are expressed in the center-of-mass system. Multibody reactions are expressed in the laboratory frame of reference.

Table 4. Reaction designator for miscellaneous quantities.

C		Spectra parameters	
901	Nuclear temperature, nonelastic (excluding fission)		
902	Nuclear temperature, total nonelastic		
903	Nuclear temperature, fission		
904	Nuclear temperature, inelastic (first neutron)		
905	Nuclear temperature (second neutron)		
		Thermal parameters	
911	Thermal scattering law, $S(\alpha, \beta)$		
		Average resonance parameters	
941	D_{observed}	944	Γ_n^I
942	Γ_γ	945	D_t
943	Γ_f	946	S_t
		Resolved resonance parameters	
951	E_0 (energy only)	965	$g\Gamma_n^2$
952	J, π	966	$g\Gamma_n$
953	λ	967	$g\Gamma_n^0$
954	δ	968	$g\Gamma_\gamma$
955	σ_0	969	Γ_n/Γ_t
956	Γ_t	970	Γ_a/Γ_t
957	Γ_n	971	Γ_γ/Γ_t
958	Γ_n^0	972	Γ_n/Γ_a
959	Γ_γ	973	Γ_f/Γ_t
960	Γ_f	974	Γ_f/Γ_a
961	Γ_a	975	Γ_γ/Γ_f
962	Γ_a	976	$\Gamma_t\sigma_0$
963	Γ_p	977	$\Gamma_f\sigma_0$
964	$g\Gamma_n^1$	978	$\Gamma_\gamma\sigma_0$
		979	$\Gamma_n\sigma_0$
		981	$\sigma_0\Gamma_f/\Gamma_t$
		982	$\sigma_0\Gamma_\gamma/\Gamma_t$
		983	$\sigma_0\Gamma_a/\Gamma_t$
		986	$g\Gamma_\gamma\Gamma_n/\Gamma_t$
		987	$2g\Gamma_n^2/\Gamma_t$
		988	$\Gamma_t^2\sigma_0$
		989	$g\Gamma_n^0\Gamma_f$
		990	$g\Gamma_f\Gamma_n/\Gamma_t$
		991	$\sigma_0\Gamma_f\Gamma_t$
		992	$\Gamma_n^0\Gamma_f/\Gamma_t$
		993	$g(\Gamma_n)^2$
		994	$g\Gamma_n\Gamma_\gamma$

Table 5. Reaction designator modifier^a
(S number).

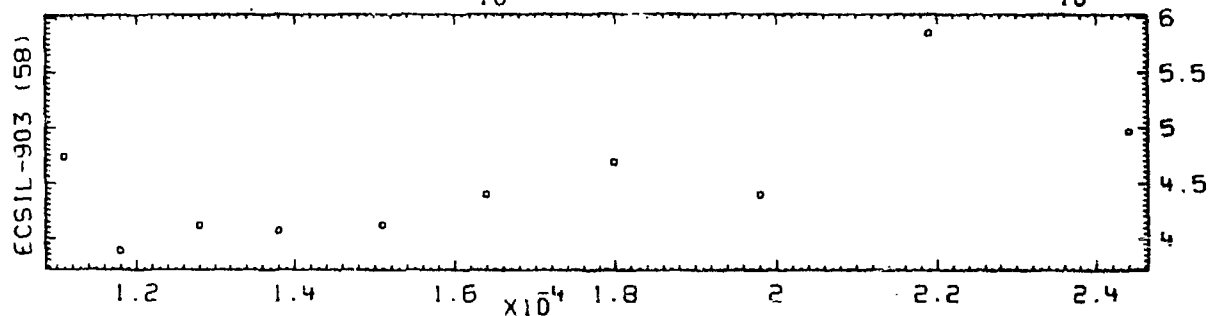
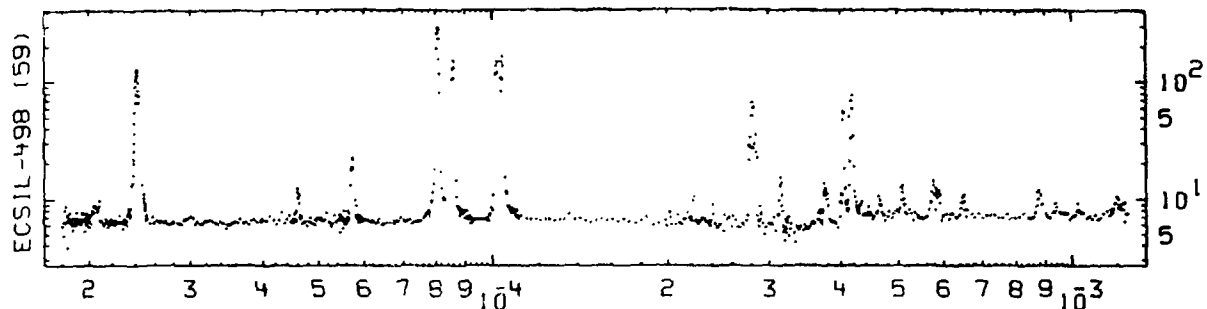
S	Modification (units)
1	Level excitation (MeV)
2	Isomer production (seconds)
3	Isomer production (minutes)
4	Isomer production (hours)
5	Isomer production (days)
6	Isomer production (years)
7	Photon production (MeV)
8	Unresolved level excitation (MeV)
9	Material temperature (Kelvin)
10	Unresolved photon production (MeV)
11	Spin state (dimensionless)
12	Isotope bound in material (dimensionless)
13	Oriented crystal (Miller number)
14	Electron production (MeV)
20	Transmission measurement (barns/atom)

^aS + 80 indicates relative distribution.

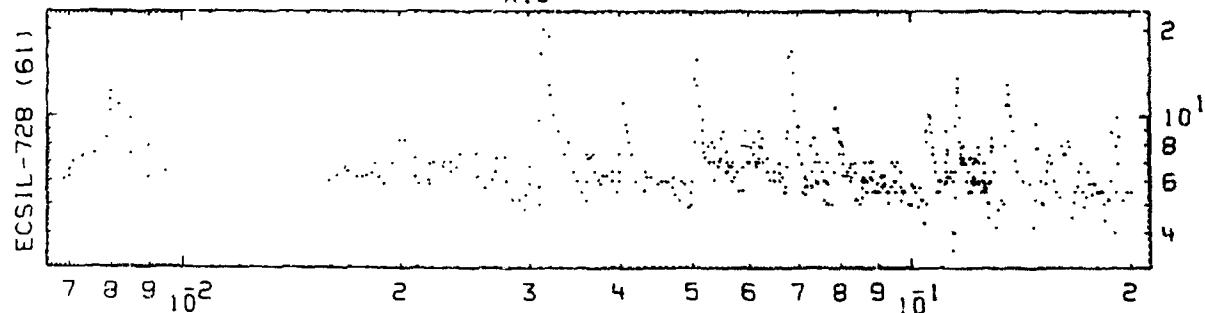
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TOTAL
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BARNs

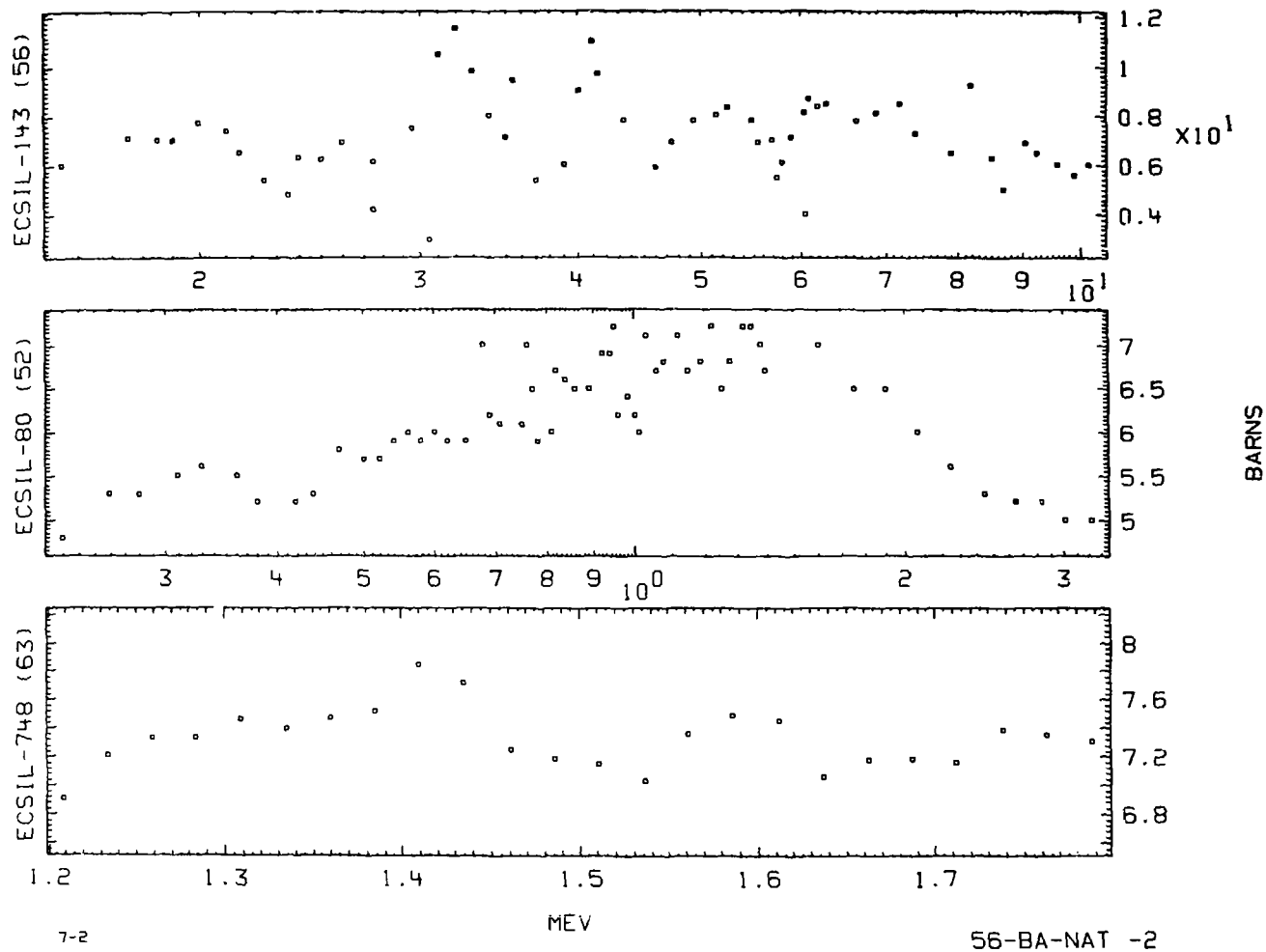


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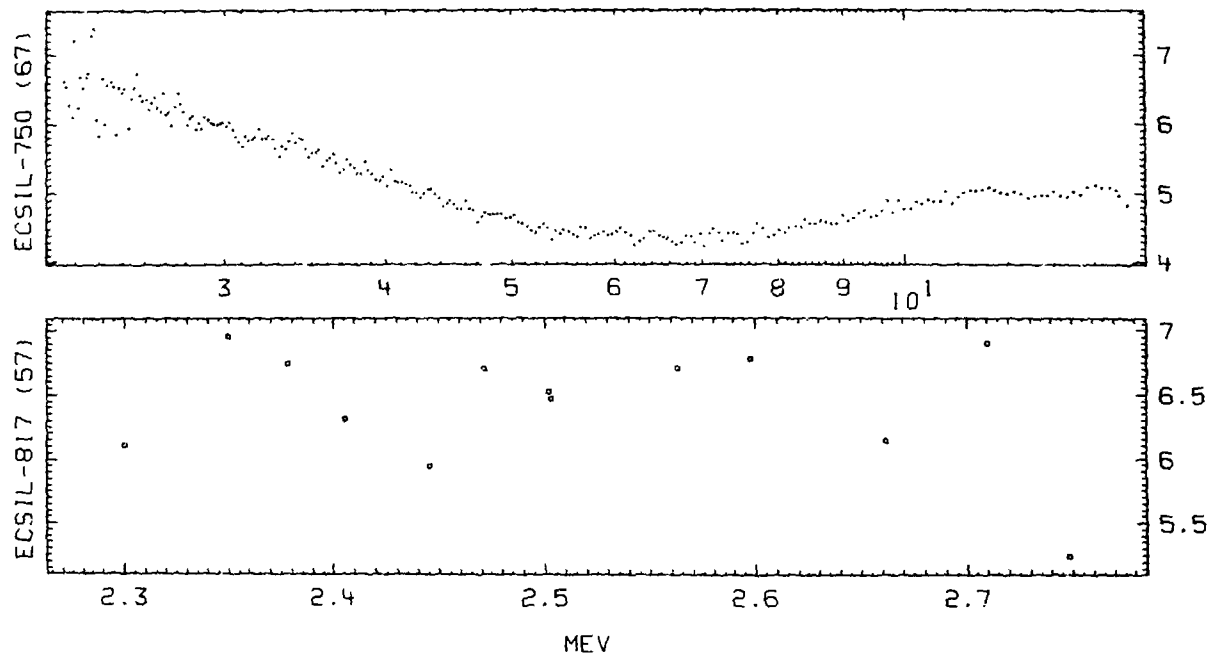
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TOTAL
CROSS SECTION

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TOTAL

56-BA-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
60	576 4.1000+ 0	1.0000- 1	4.3000+ 0	1.0000- 1
58	324 1.3140+ 1	5.0000- 2	5.0110+ 0	9.0010- 2
52	81 1.4000+ 1		5.1710+ 0	1.0000- 1
58	324 1.4100+ 1	4.0000- 2	5.0210+ 0	7.0010- 2

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58	324 1.5600+ 1	1.3000- 1	4.9700+ 0	1.0000- 1
61	233 2.8400+ 1		4.0900+ 0	4.0000- 1
50	281 4.2000+ 1	1.0000+ 0	3.5700+ 0	1.2000- 1

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ELASTIC
CROSS SECTION

56-BA-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
64 870	5.0000- 1	5.0000- 2	6.2800+ 0	3.4000- 1
63 1750	6.5000- 1		5.9400+ 0	2.6000- 1
64 870	8.0000- 1	5.0000- 2	5.4900+ 0	2.8000- 1
54 103	1.0000+ 0	8.0000- 2	6.6000+ 0	9.9000- 1
65 1509	2.0000+ 0	5.0000- 2	6.6000+ 0	
60 576	4.1000+ 0	1.0000- 1	2.5000+ 0	3.0000- 1

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N, GAMMA

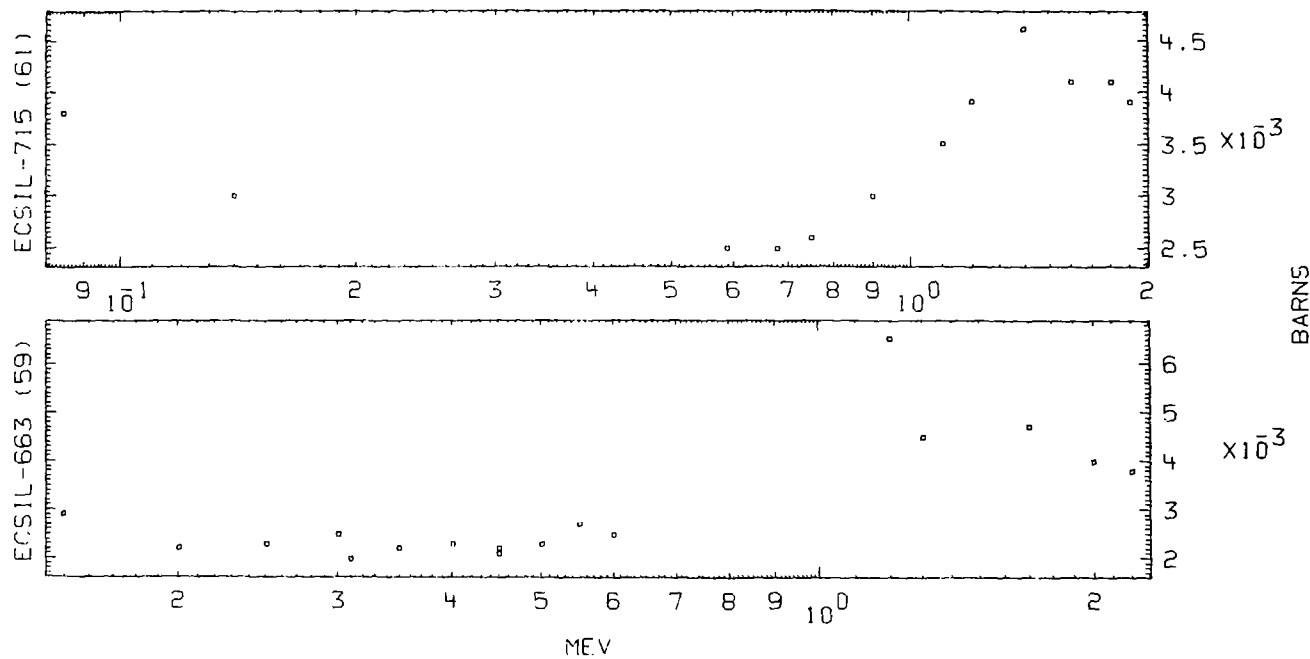
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REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63 1	3.0000- 2	8.0010- 3	6.1010- 2	5.5010- 3
63 1	6.5000- 2	2.1000- 2	3.3000- 2	3.0000- 3

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N, GAMMA
CROSS SECTION

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N, GAMMA
CROSS SECTION

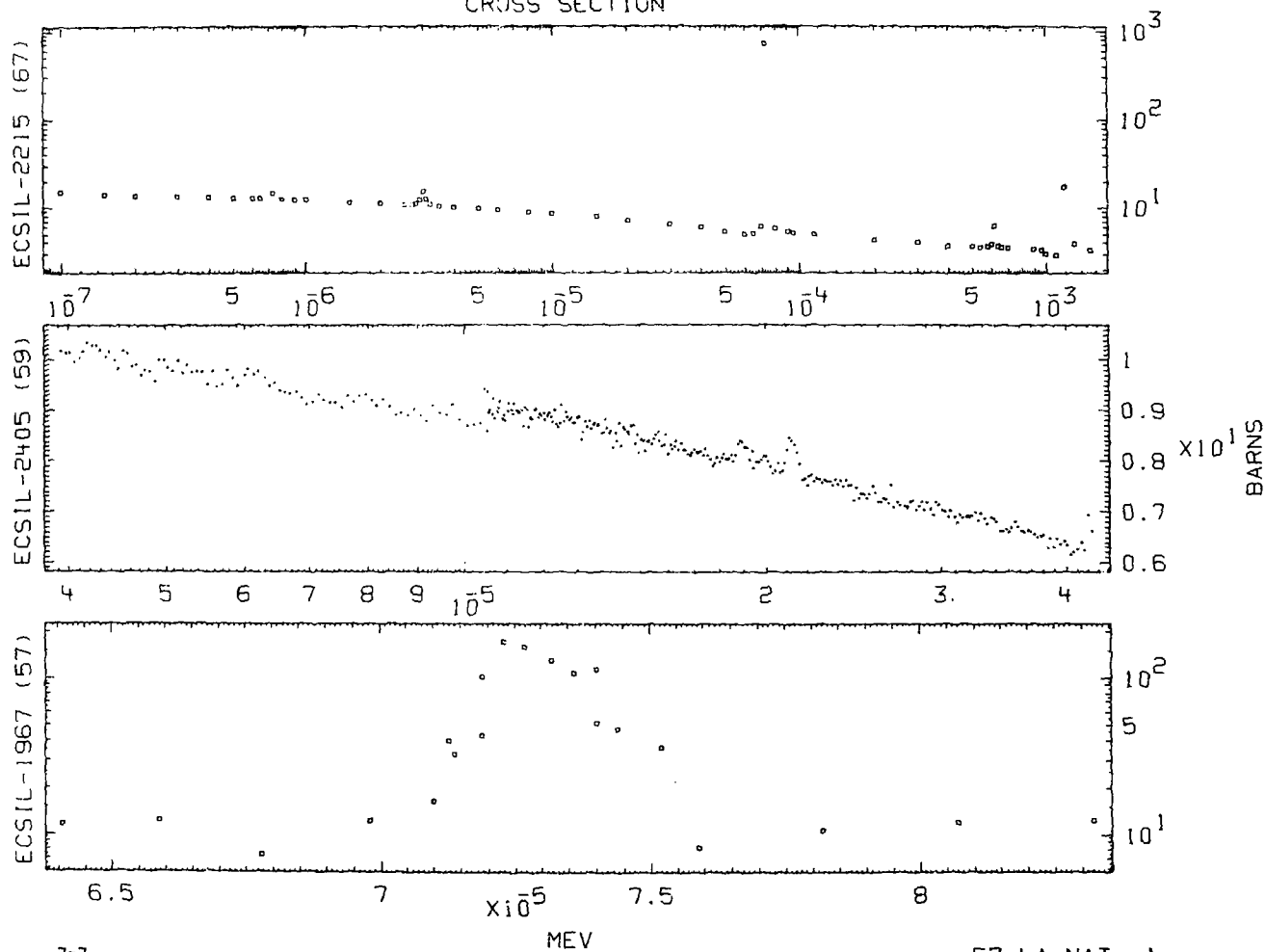
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REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
47 888	2.5300- 8		5.1100- 1	1.0220- 1
58 43	2.1000- 2	4.0000- 3	8.4010- 3	4.0000- 4
66 1788	2.4000- 2		7.0000- 3	1.0000- 3
57 305	2.4000- 2	5.0000- 3	1.1400- 2	1.1000- 3
59 526	1.9500- 1	1.5000- 2	3.2000- 3	3.0000- 4
58 363	2.0000- 1	1.5000- 2	5.1600- 3	8.0000- 4
58 1044	2.5000+ 0		1.1000- 3	5.0000- 4
58 363	2.7000+ 0		1.1400- 3	2.3000- 4
68 3375	2.9000+ 0	2.0000- 1	3.0000- 3	4.0000- 4
67 1991	3.0000+ 0	2.0000- 1	1.2000- 3	2.0000- 4
58 1044	3.1000+ 0		1.0000- 3	4.0000- 4
58 1044	4.0000+ 0		7.4000- 4	3.0000- 4
58 363	4.0000+ 0		7.8000- 3	2.4000- 4
57 521	1.4500+ 1		1.3000- 3	4.0000- 4

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TOTAL
CROSS SECTION

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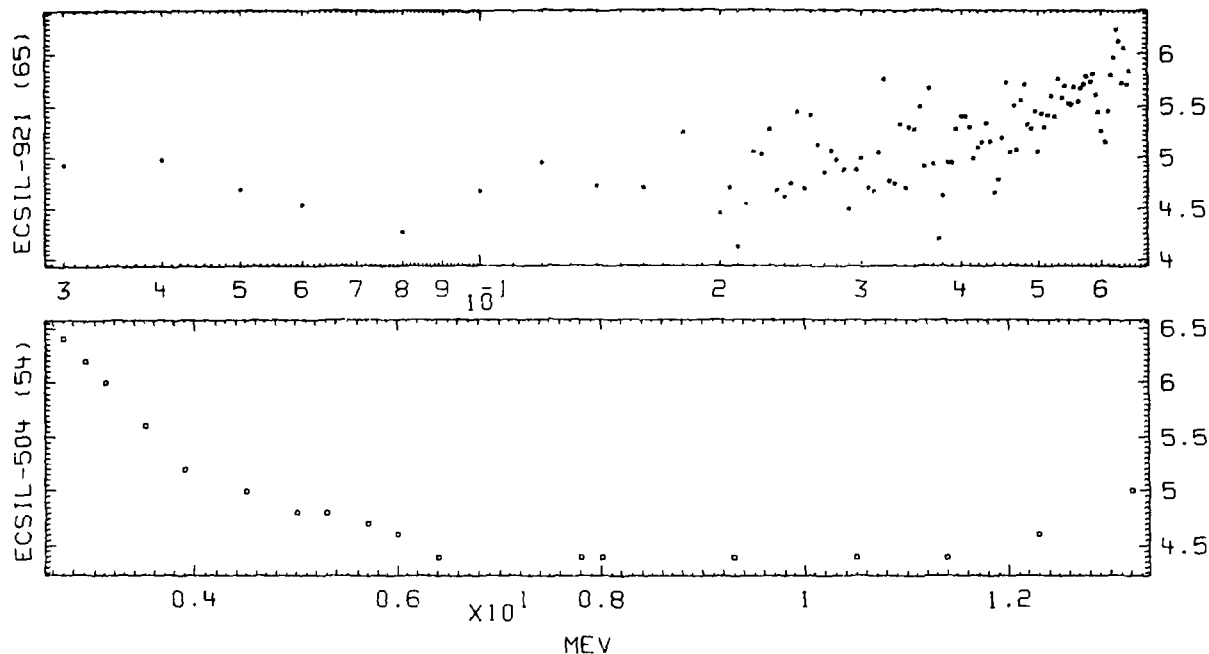


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BARNs

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TOTAL

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REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
52	81	1.4000+ 1	5.1810+ 0	1.0000- 1	58	324	1.5120+ 1	1.3000- 1	4.7300+ 0
58	324	1.4590+ 1	1.1000- 1	4.7700+ 0	7.0000- 2	58	324	1.5600+ 1	1.3000- 1
								4.6900+ 0	8.0000- 2

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N, GAMMA
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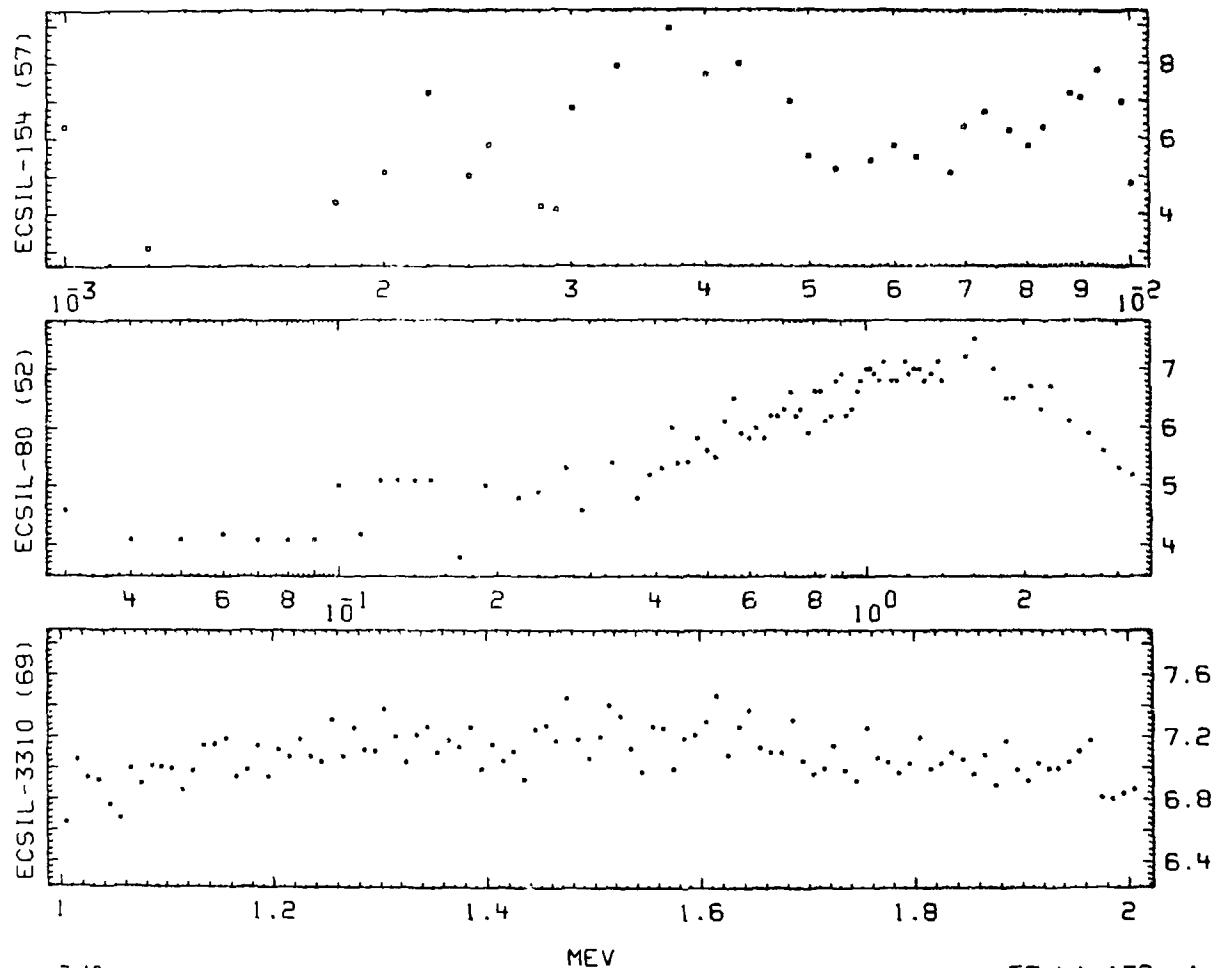
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REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63	1 3.0000- 2	8.0010- 3	5.5010- 2	1.1000- 2
63	1 6.5000- 2	2.1000- 2	1.8000- 2	4.0000- 3

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TOTAL
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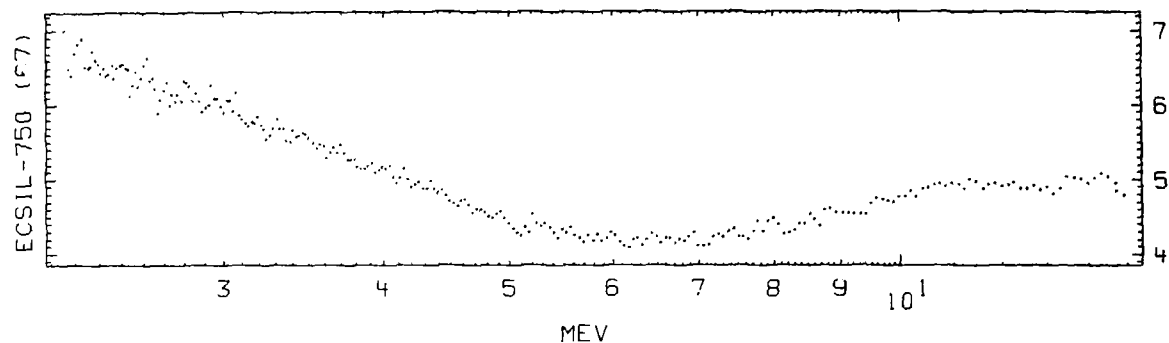
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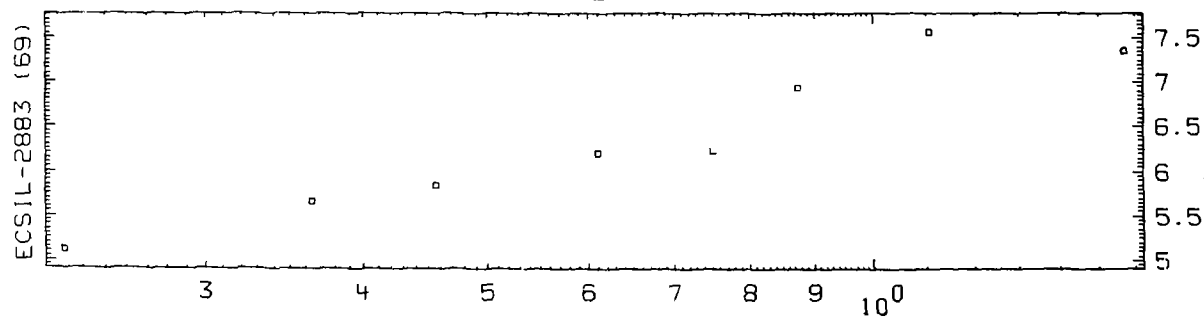


BARNs

03/01/74

ELASTIC
CROSS SECTION

57-LA-139



BARNs

7-11

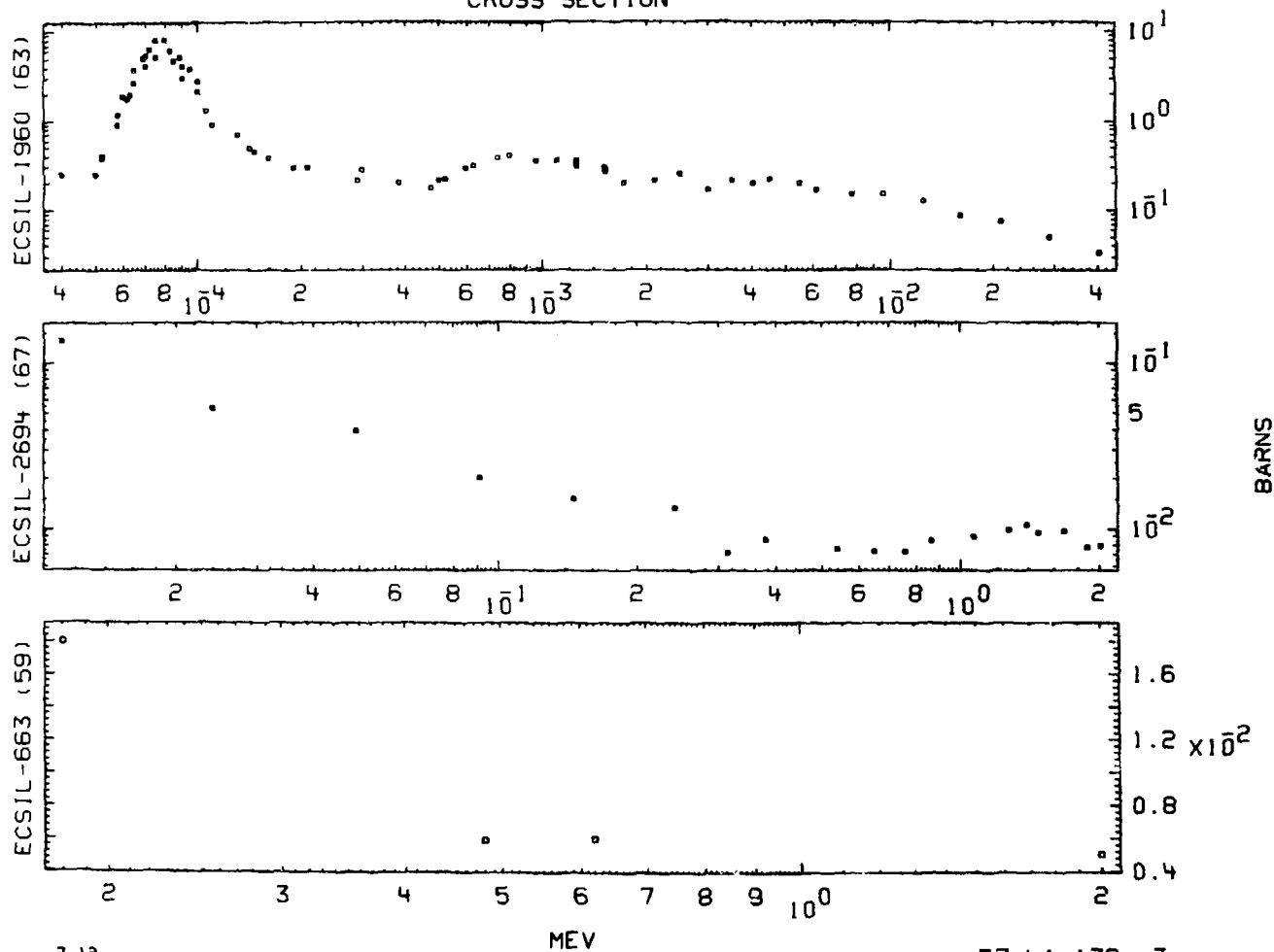
MEV

57-LA-139 -2

03/01/74

N, GAMMA
CROSS SECTION

57-LA-139



03/01/74

TOTAL
CROSS SECTION

57-LA-139

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 324	1.3140+ 1	5.0000- 2	4.8100+ 0	8.0010- 2
58 324	1.3600+ 1	7.0010- 2	4.7800+ 0	7.0010- 2
58 324	1.4100+ 1	4.0000- 2	4.7900+ 0	7.0010- 2

03/01/74

N, GAMMA

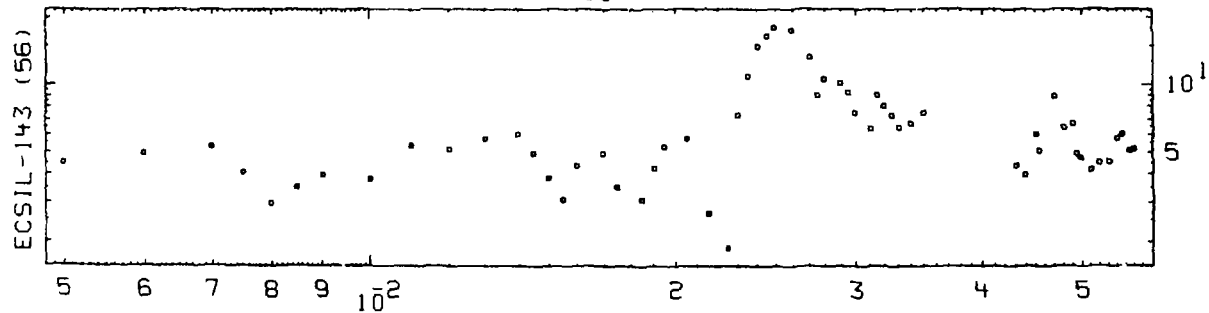
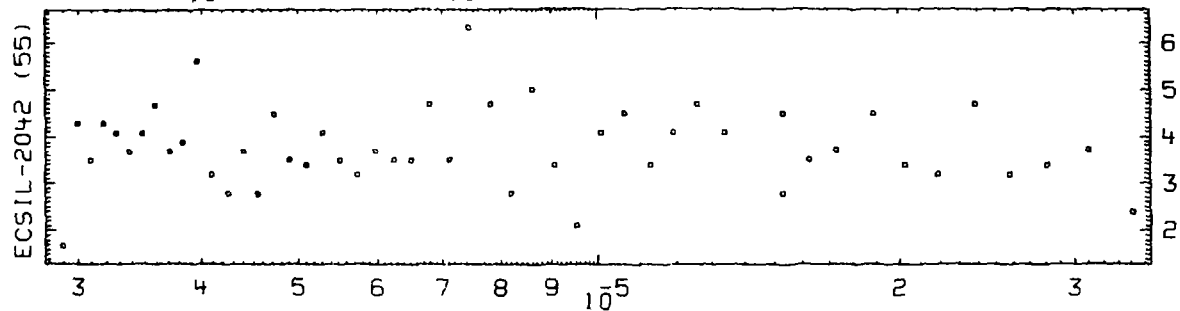
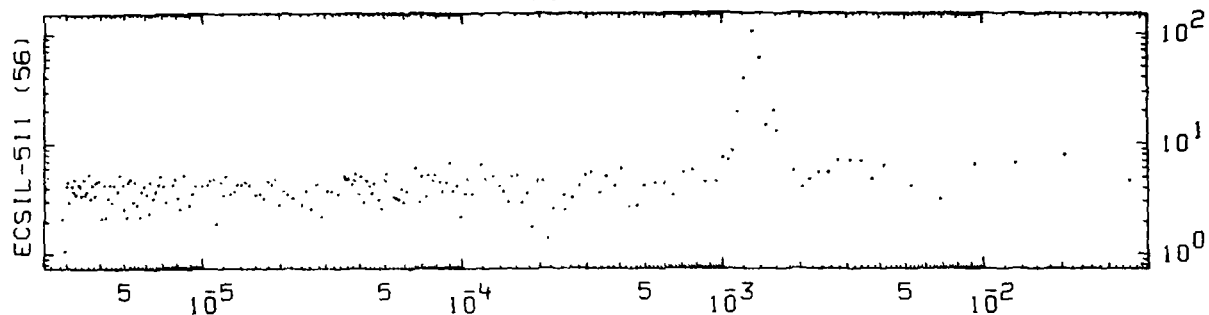
57-LA-139

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
47 888	2.5300- 8		8.4000+ 0	1.6800+ 0
57 23	2.1000- 2	4.0000- 3	4.8000- 2	1.5000- 2
66 1788	2.4000- 2		5.0000- 2	1.0000- 2
57 305	2.4000- 2	5.0000- 3	5.0000- 2	7.0010- 3
61 677	3.0000- 2	7.0010- 3	5.5010- 2	1.0000- 2
61 677	6.5000- 2	2.0000- 2	1.8000- 2	3.0000- 3
59 526	1.9500- 1	1.5000- 2	1.0000- 2	2.0000- 3
48 327	1.0000- 0		5.0000- 3	
67 1991	3.0000+ 0	2.0000- 1	4.6000- 3	7.0000- 4
65 2216	1.4000+ 1	4.0000- 1	3.6000- 3	6.0000- 4
57 521	1.4500+ 1		1.5000- 3	1.0000- 4
67 1695	1.4700+ 1		1.4000- 3	3.0000- 4
60 672	1.4800+ 1	8.0010- 1	1.1000- 3	2.0000- 4

03/01/74

TOTAL
CROSS SECTION

58-CE-NAT

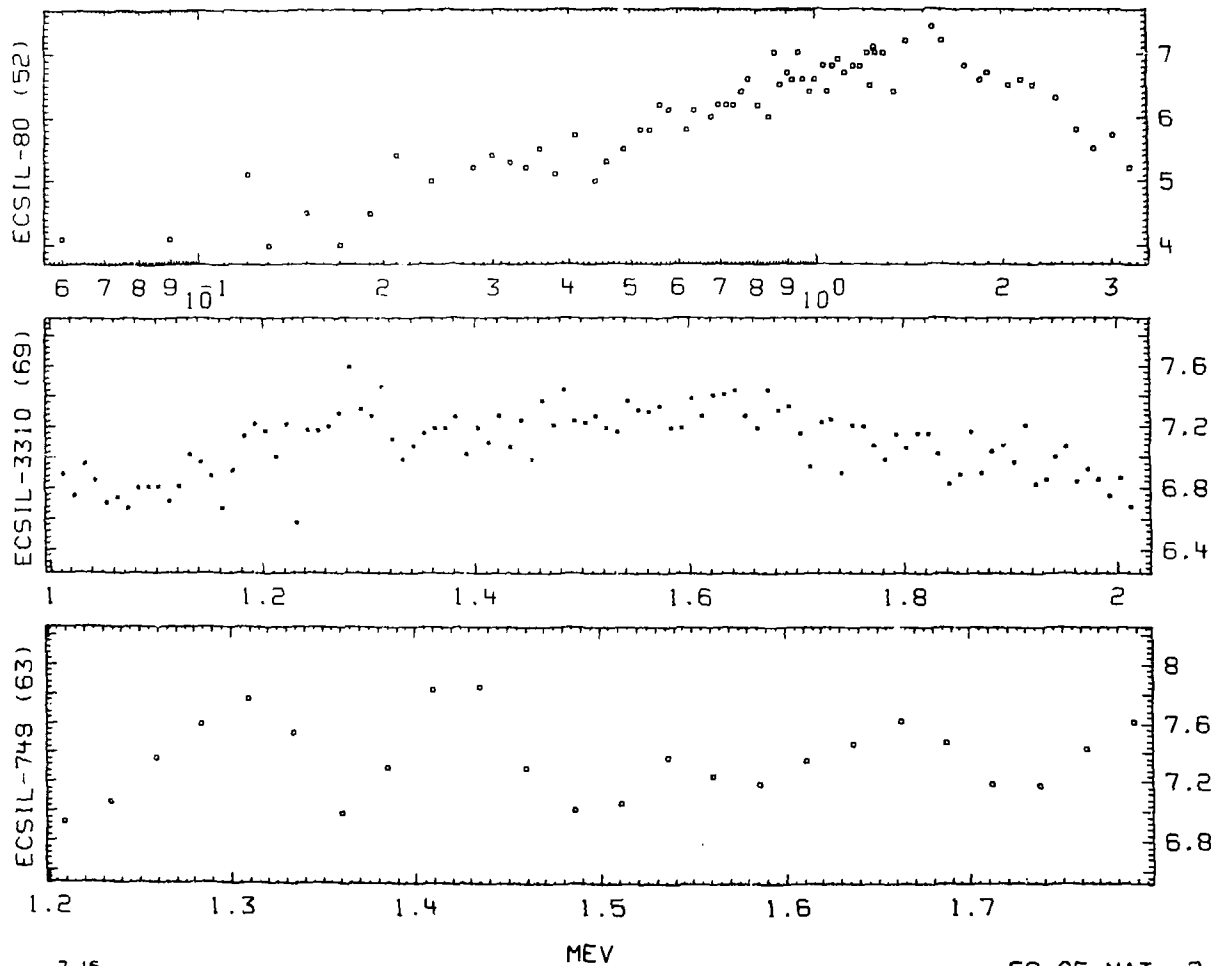


BARNs

03/01/74

TOTAL
CROSS SECTION

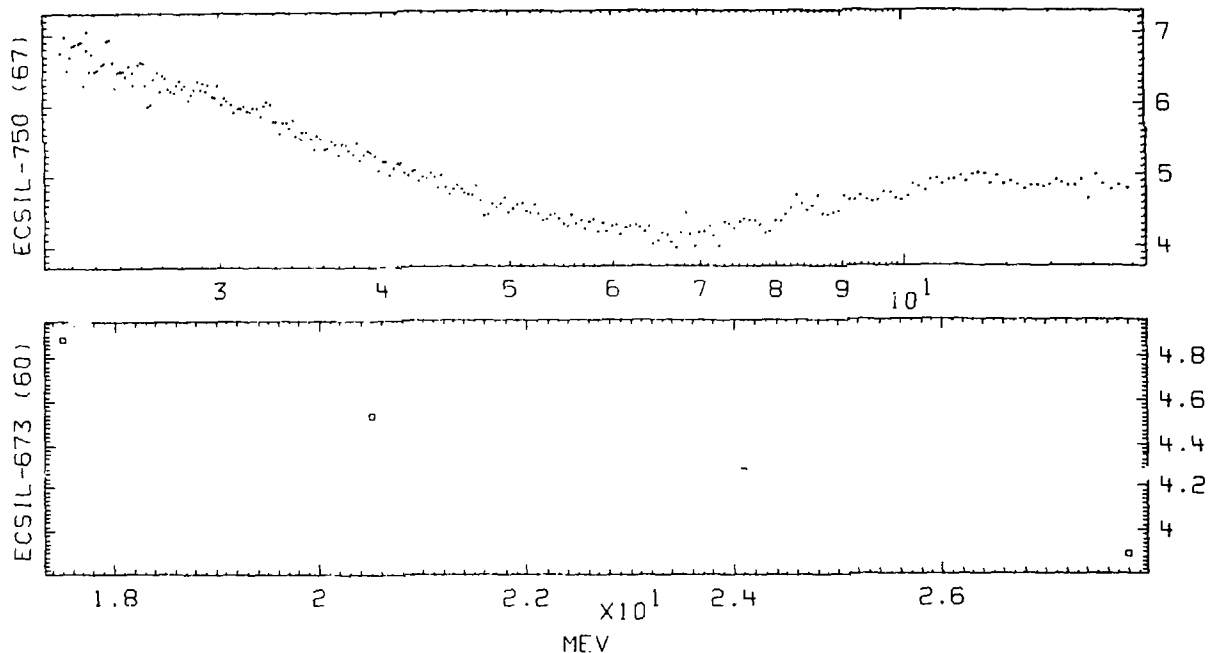
58-CE-NAT



03/01/74

TOTAL
CROSS SECTION

58-CE-NAT



03/01/74

TOTAL

58-CE-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
49 844	1.1500- 4	1.1500- 5	5.7710+ 0	
49 844	3.0000- 4	3.0000- 5	4.8000+ 0	
58 324	1.3140+ 1	5.0000- 2	4.9900+ 0	8.0010- 2

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
52 81	1.4000+ 1		5.0810+ 0	1.0000- 1
58 324	1.4100+ 1	4.0000- 2	5.0100+ 0	7.0000- 2
58 324	1.5600+ 1	1.3000- 1	5.0000+ 0	9.0000- 2

03/01/74

ELASTIC
CROSS SECTION

58-CE-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
54 103	1.0000+ 0	8.0000- 2	6.7000+ 0	1.0050+ 0

03/01/74

N, GAMMA

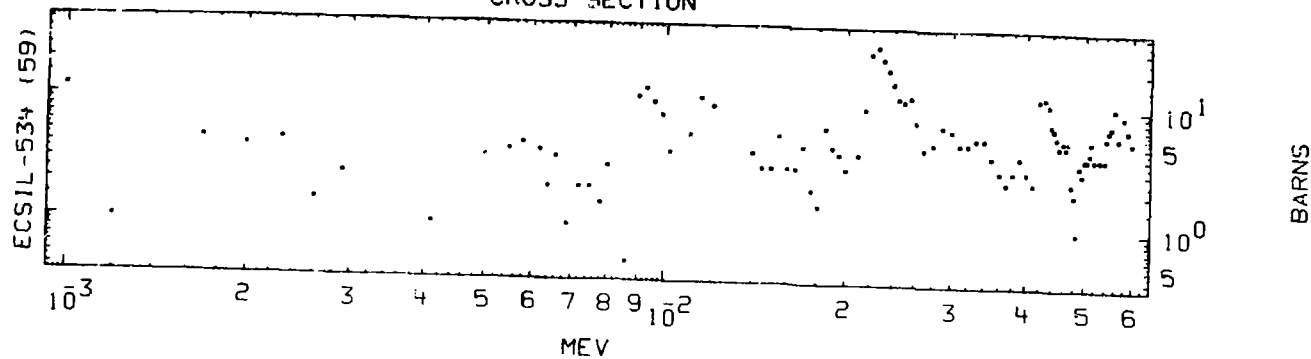
58-CE-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
61 677	3.0000- 2	7.0010- 3	3.5000- 2	5.0000- 3
63 1	3.0000- 2	8.0010- 3	3.5000- 2	6.0010- 3
61 677	6.5000- 2	2.0000- 2	8.0010- 3	2.0000- 3
63 1	6.5000- 2	2.1000- 2	8.0010- 3	3.0000- 3
60 674	4.0000- 1	9.0010- 2	8.0010- 3	3.0000- 3

03/01/74

TOTAL
CROSS SECTION

58-CE-140



03/01/74

N, GAMMA

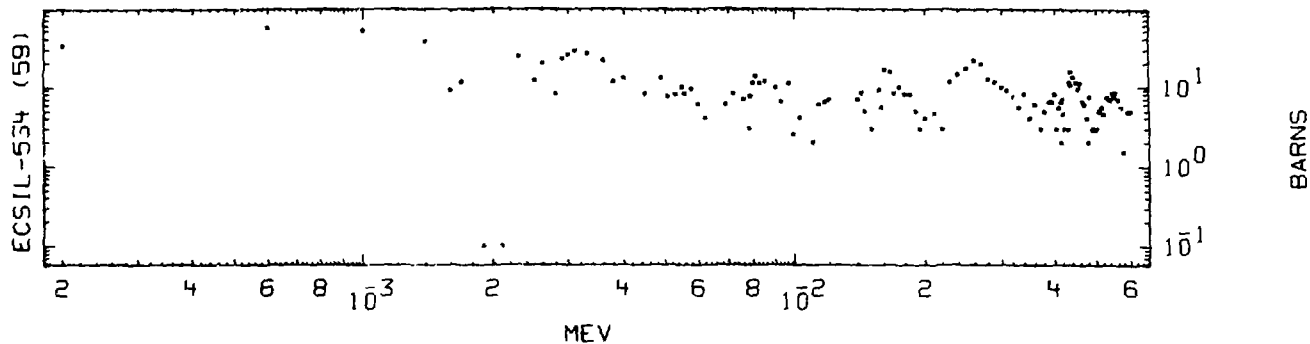
58-CE-140

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
57 305	2.4000- 2	5.0000- 3	3.1000- 2	4.0000- 3

03/01/74

TOTAL
CROSS SECTION

58-CE-142



03/01/74

N, GAMMA

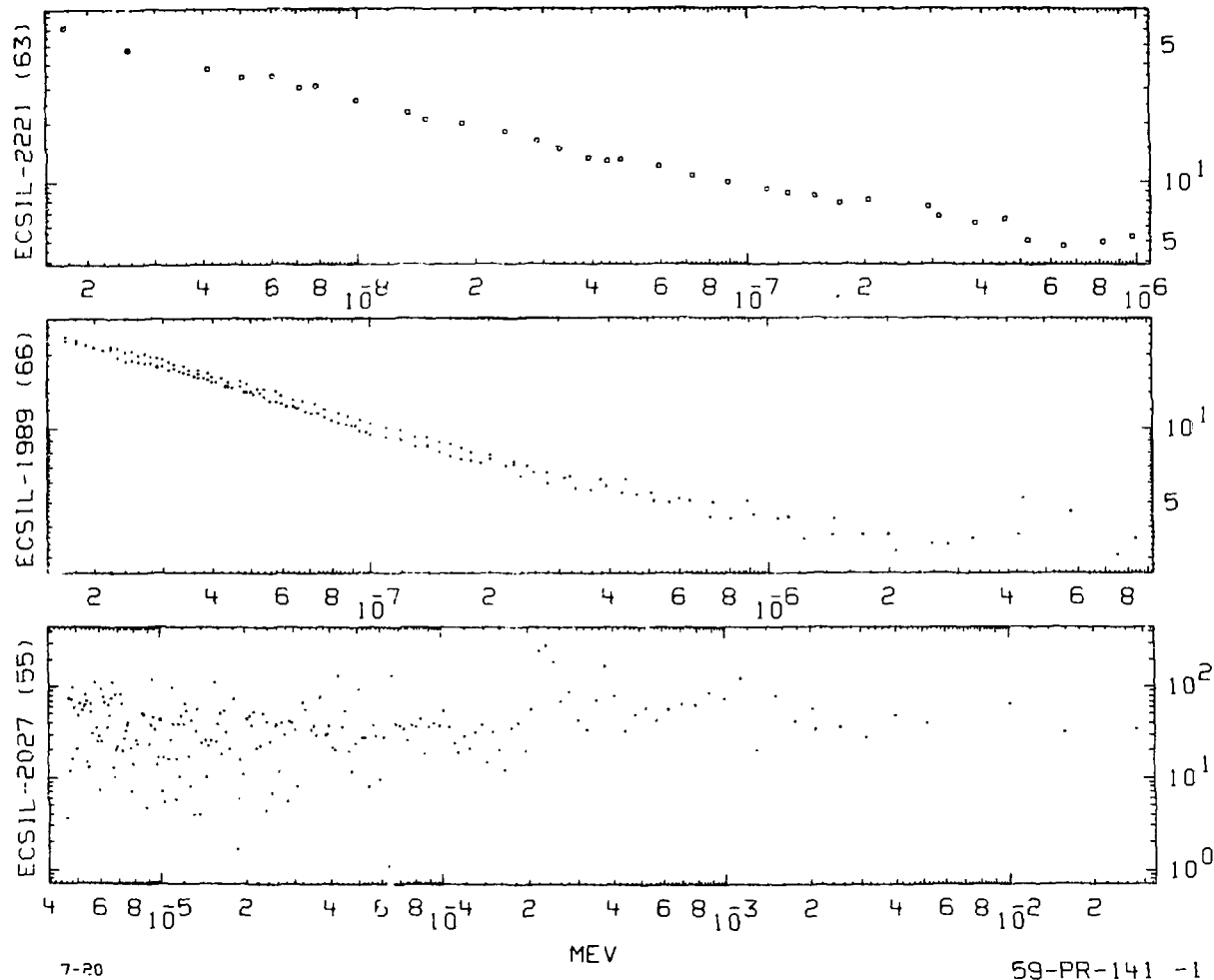
58-CE-142

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 1788	2.4000- 2		5.2500- 1	5.0000- 2
57 305	2.4000- 2	5.0000- 3	4.2500- 1	4.3000- 2
59 526	1.9500- 1	1.5000- 2	2.2000- 2	5.0000- 3
67 1991	3.0000+ 0	2.0000- 1	3.3400- 2	6.0000- 3
57 521	1.4500+ 1		7.5010- 3	

03/01/74

TOTAL
CROSS SECTION

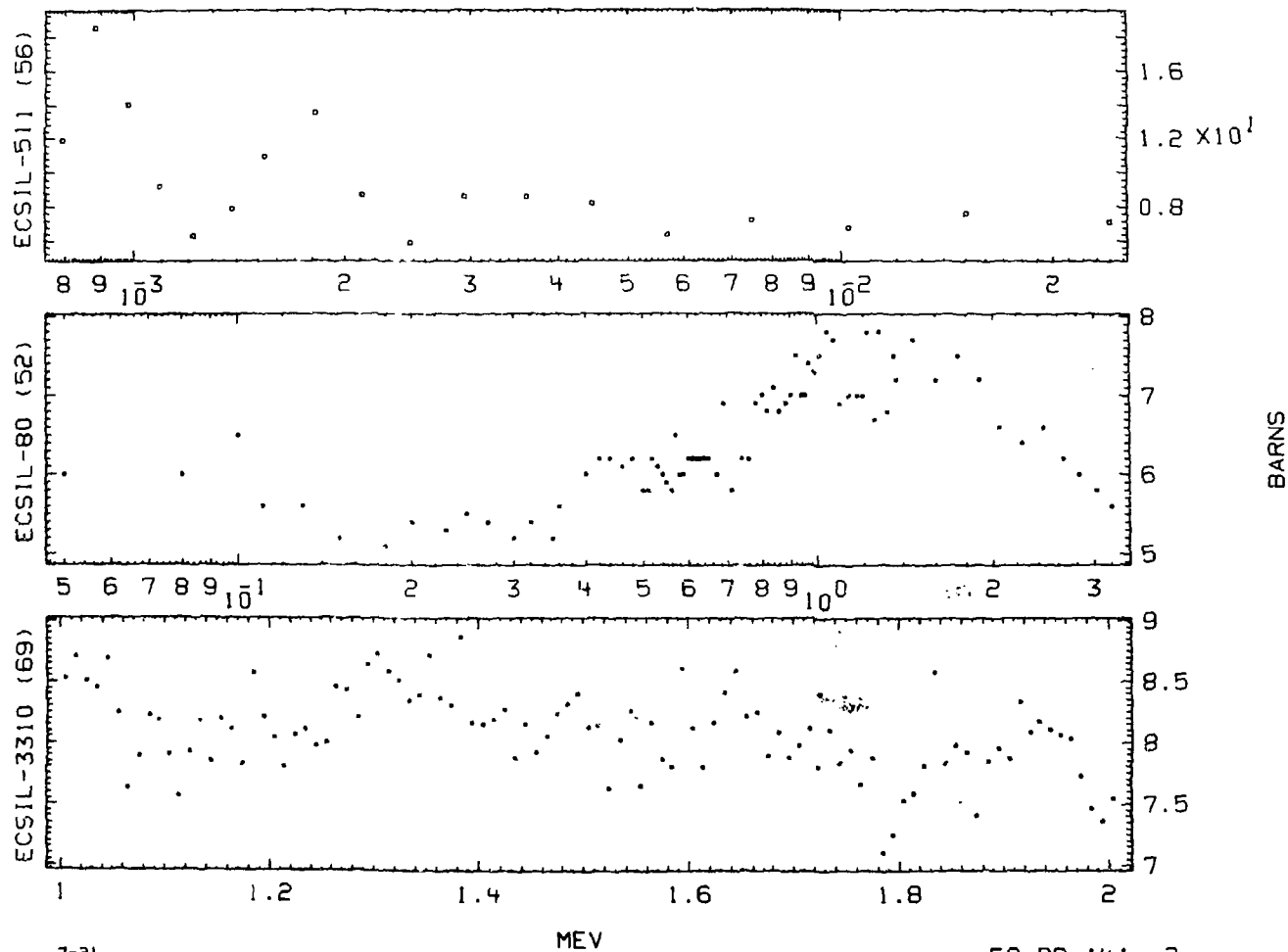
59-PR-141



03/01/74

TOTAL
CROSS SECTION

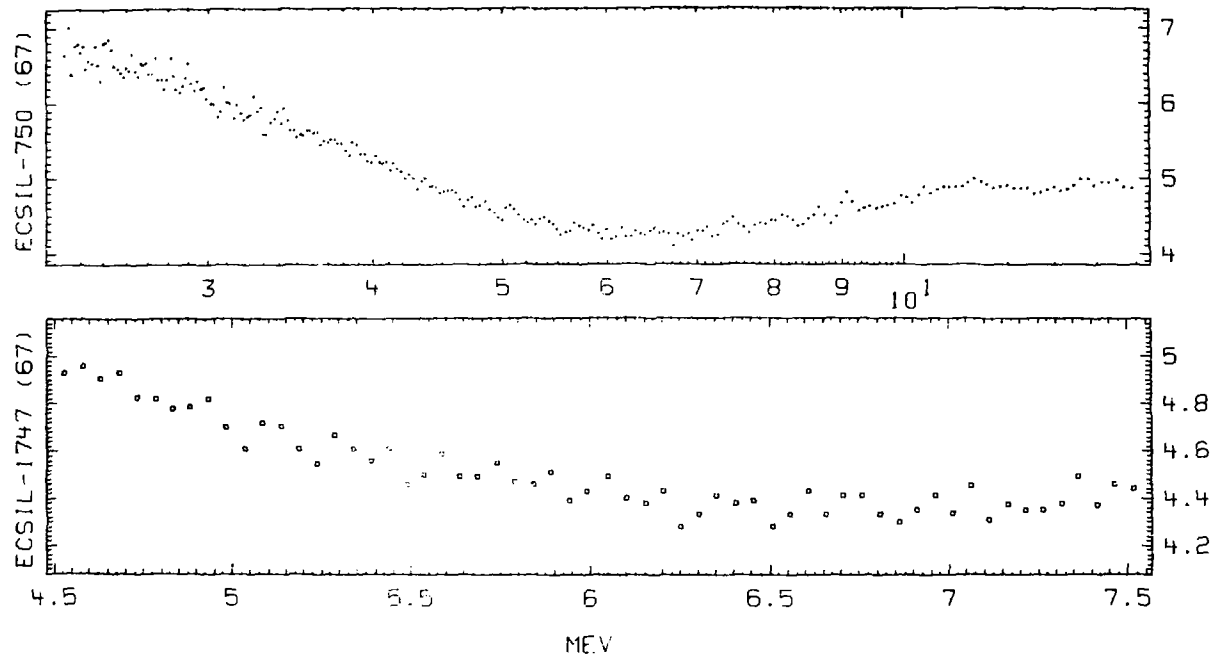
59-PR-141



03/01/74

TOTAL
CROSS SECTION

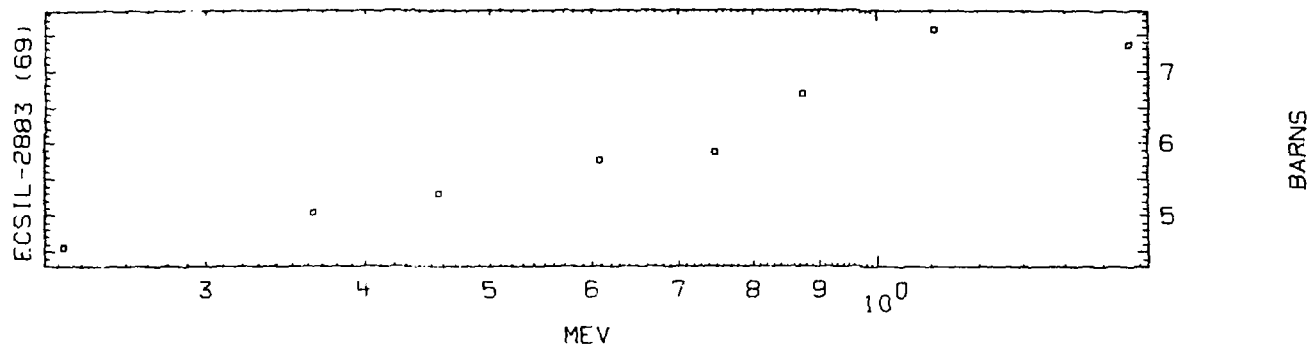
59-PR-141



03/01/74

ELASTIC
CROSS SECTION

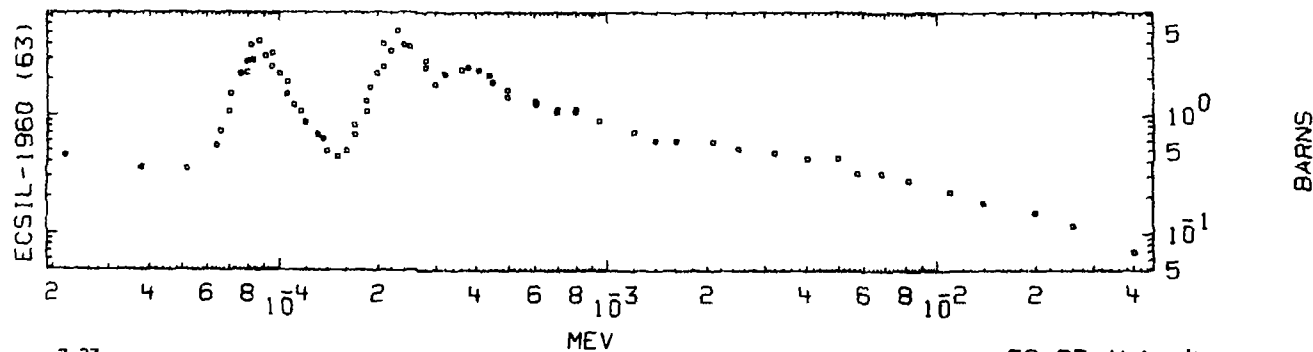
59-PR-141



03/01/74

N, GAMMA
CROSS SECTION

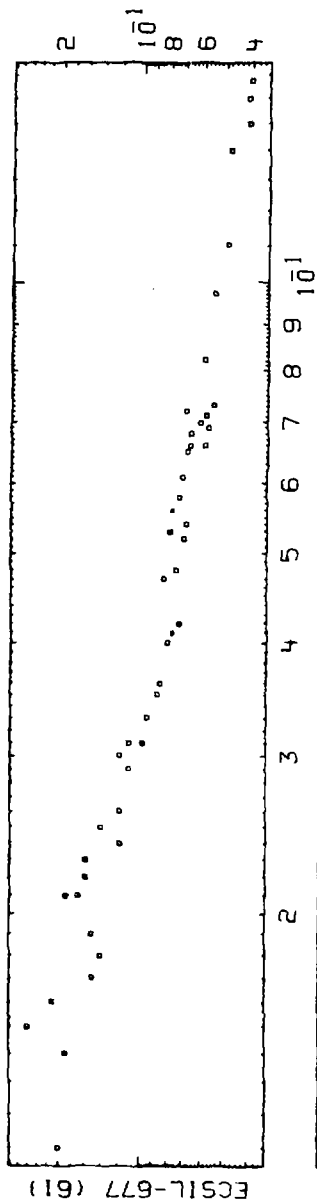
59-PR-141



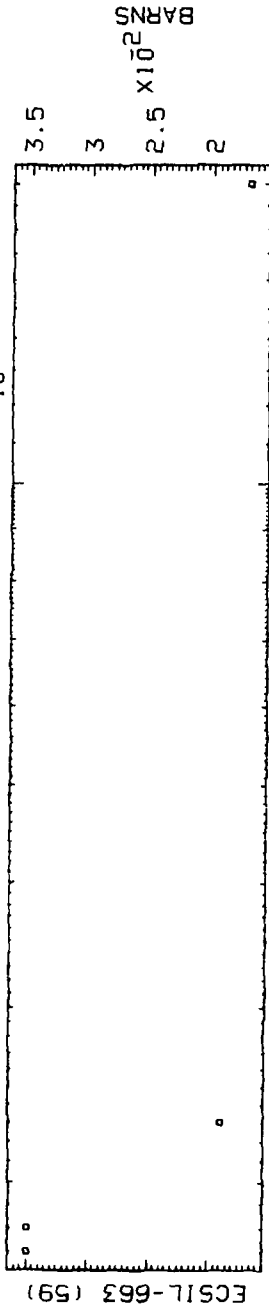
03/01/74

N. GAMMA CROSS SECTION

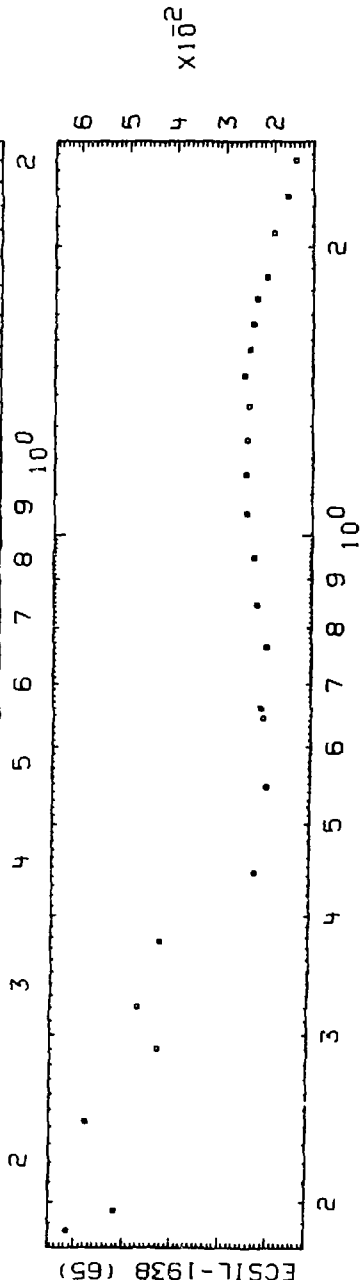
59-PR-141



ECSIL-677 (61)



ECSIL-663 (59)



ECSIL-1938 (65)

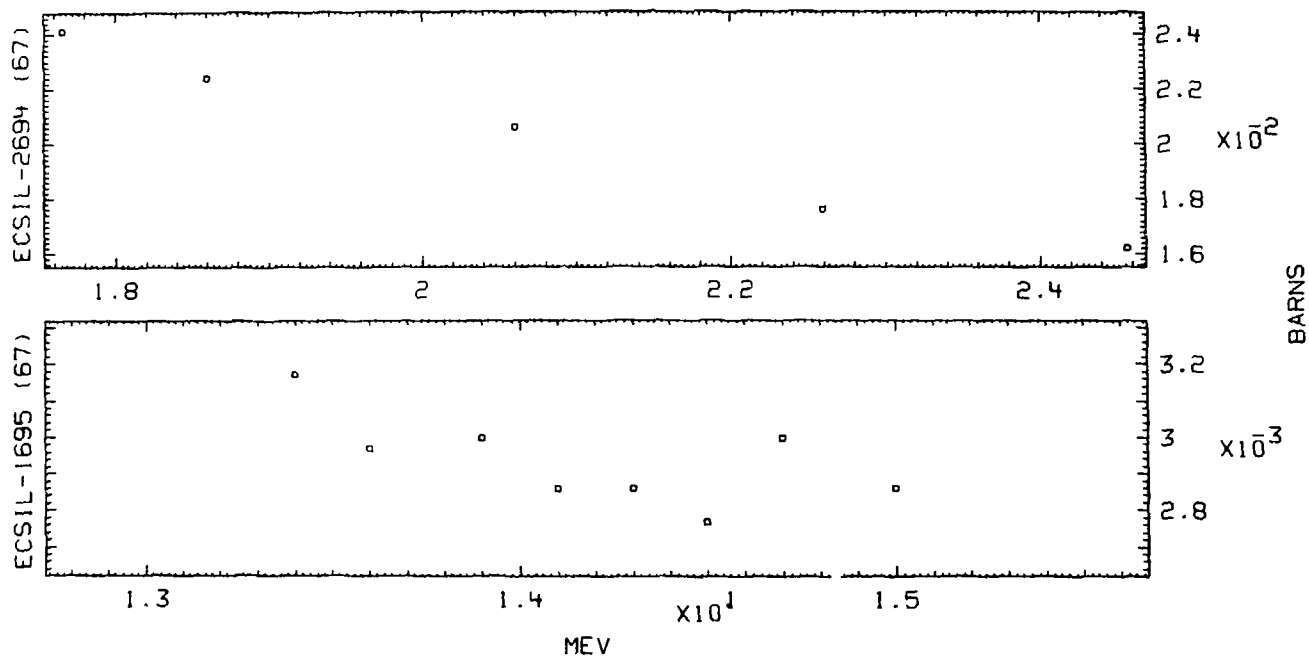
7-24

59-PR-141 -5

03/01/74

N, GAMMA
CROSS SECTION

59-PR-141



03/01/74

TOTAL

59-PR-141

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
52	81 1.4000+ 1		4.9300+ 0	2.5000- 1

03/01/74

N. GAMMA
CROSS SECTION

59-PR-141

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
47 888	2.5300- 8		1.0100+ 1	2.0200+ 0
57 23	2.1000- 2	4.0000- 3	1.6000- 1	4.0000- 2
66 1788	2.4000- 2		1.0000- 1	1.5000- 2
57 305	2.4000- 2	5.0000- 3	5.4710- 1	5.5010- 2
59 526	2.5000- 2	5.0000- 3	1.5500- 1	1.5000- 2
63 1	3.0000- 2	8.0010- 3	1.1500- 1	1.0000- 2
63 1	6.5000- 2	2.1000- 2	5.9010- 2	5.3010- 3
59 526	1.9500- 1	1.5000- 2	3.8000- 2	4.0000- 3
48 327	1.0000+ 0		1.1030- 2	
58 1044	2.5000+ 0		8.6000- 3	4.0000- 4
67 1991	3.0000+ 0	2.0000- 1	1.2200- 2	2.4000- 3
58 1044	3.1000+ 0		7.1000- 3	3.0000- 4
58 1044	4.0000+ 0		6.3000- 3	2.0000- 4
57 521	1.4500+ 1		3.3000- 3	3.0000- 4
63 756	1.4800+ 1	2.0000- 1	2.3000- 3	1.1000- 3
60 672	1.4800+ 1	8.0010- 1	2.1000- 3	1.0000- 3

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA HALF-LIFE BARNs MINUTES
68 2345	3.0000+ 0	2.0000- 1	2.9000- 4	5.0000- 4 1.4600+ 1

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA HALF-LIFE BARNs HOURS
68 2345	3.0000+ 0	2.0000- 1	1.0900- 2	9.0000- 4 9.2000+ 0

03/01/74

N, GAMMA
CROSS SECTION

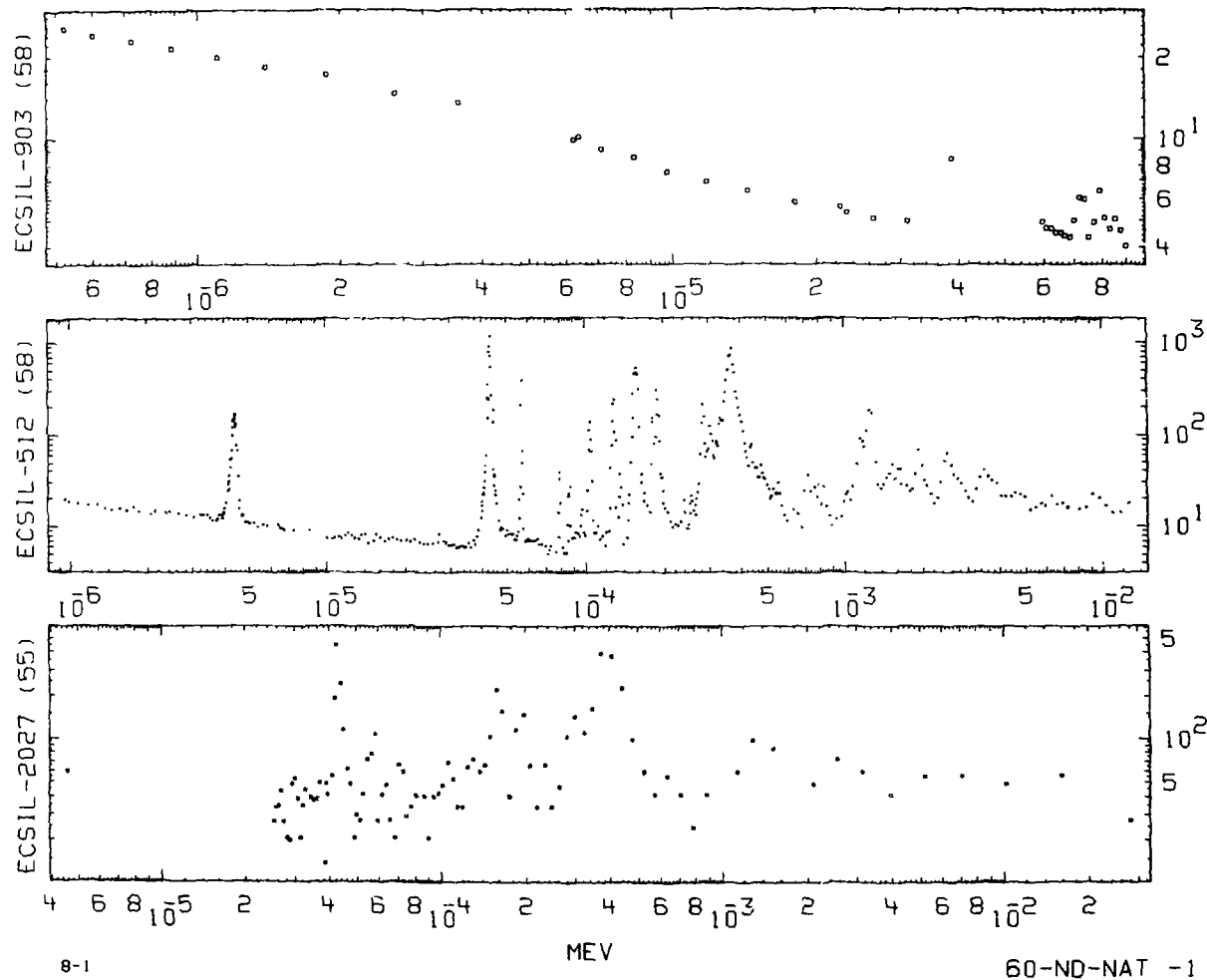
59-PR-143

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
59 2957	2.5300- 8		8.9000+ 1	1.0000+ 1

03/01/74

TOTAL
CROSS SECTION

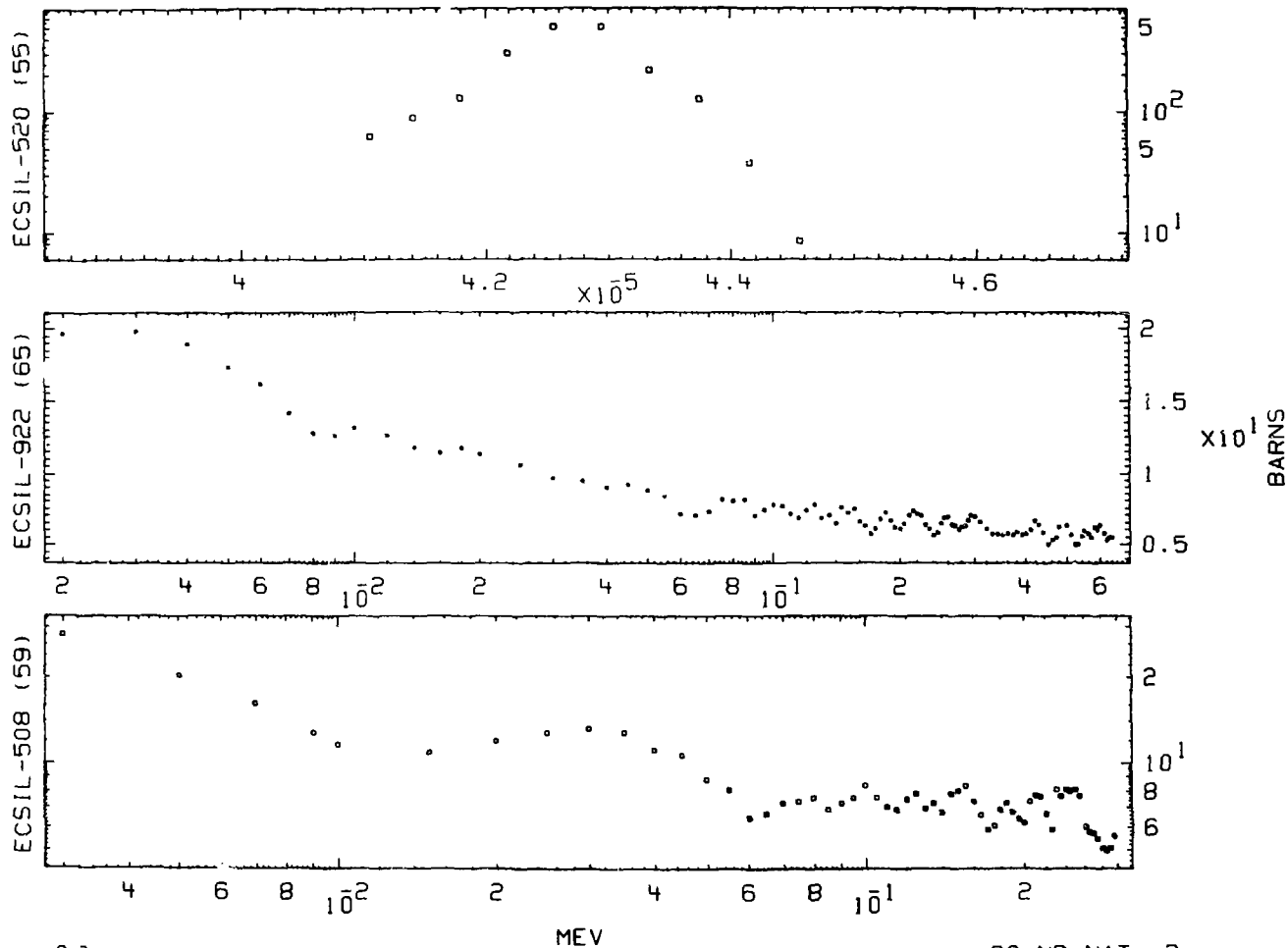
60-ND-NAT



03/01/74

TOTAL
CROSS SECTION

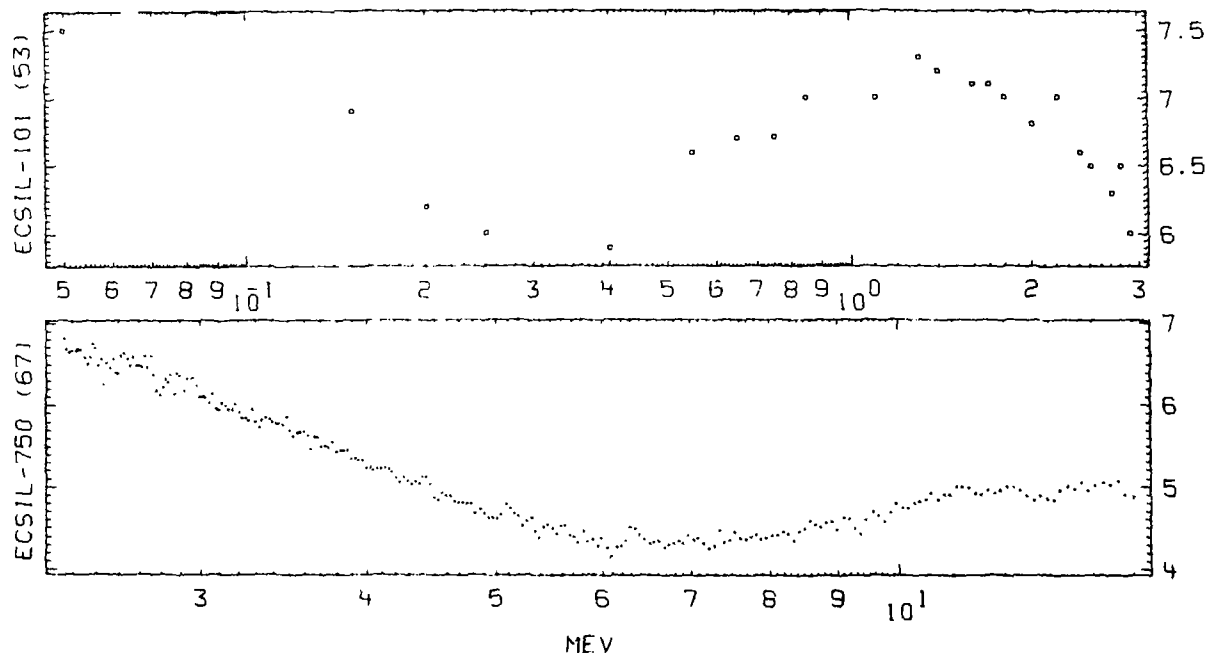
60-ND-NAT



03/01/74

TOTAL
CROSS SECTION

60-ND-NAT



03/01/74

TOTAL

60-ND-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
58 324	1.3140+	1 5.0000-	2 4.9200+	0 9.0010- 2
58 324	1.4100+	1 4.0000-	2 5.0910+	0 8.0010- 2
58 324	1.5600+	1 1.3000-	1 5.0600+	0 1.1000- 1

03/01/74

ELASTIC
CROSS SECTION

60-ND-143

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 439 2.5300- 8			7.5000+ 1	7.0000+ 0

03/01/74

N, GAMMA

60-ND-143

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 439 2.5300- 8			3.3500+ 2	2.0000+ 1

03/01/74

TOTAL
CROSS SECTION

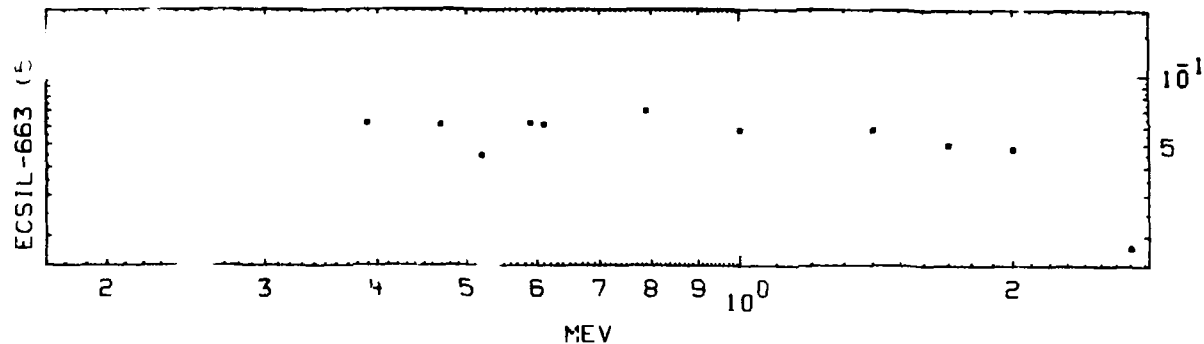
60-ND-145

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 2720	2.5300- B		6.5000+ 1	3.0000+ 0

03/01/74

N, GAMMA
CROSS SECTION

60-ND-148



03/01/74

N, GAMMA

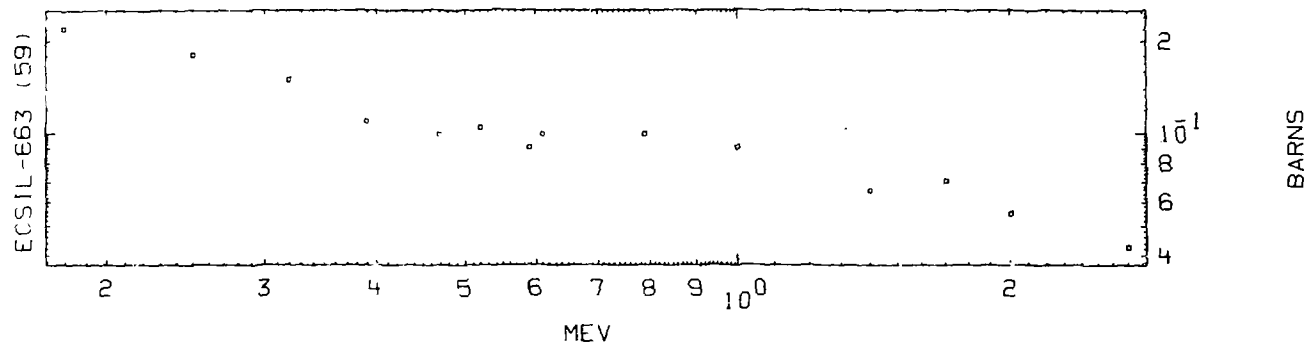
60-ND-148

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
68 2856	2.4000- 2		1.6500- 1	3.5000- 2

03/01/74

N, GAMMA
CROSS SECTION

60-ND-150



03/01/74

N, GAMMA

60-ND-150

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 2856	2.4000- 2		1.2500- 1	2.5000- 2

03/01/74

TOTAL
CROSS SECTION

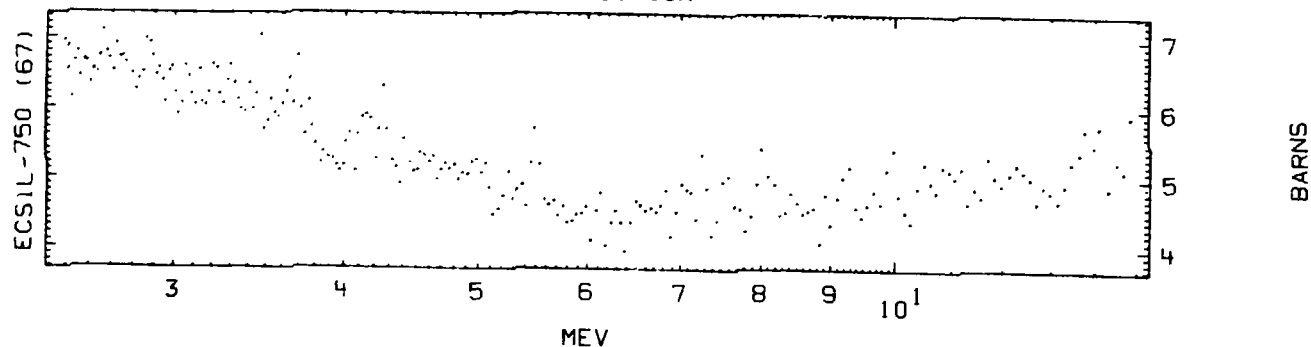
ND203

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65 949	1.4400- 6		5.4600+ 1	1.9000+ 0

03/01/74

TOTAL
CROSS SECTION

61-PM-147



03/01/74

TOTAL

61-PM-147

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
71 3253	2.5300- 2		1.9800+ 2	8.0000+ 0

03/01/74

TOTAL
CROSS SECTION

61-PM-148

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
69 2772	2.5000- 8		6.8000+ 3	

03/01/74

N, GAMMA

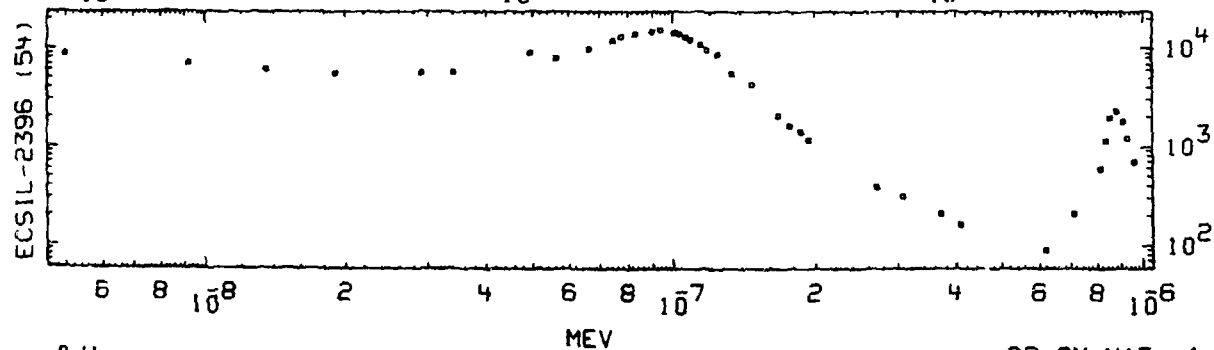
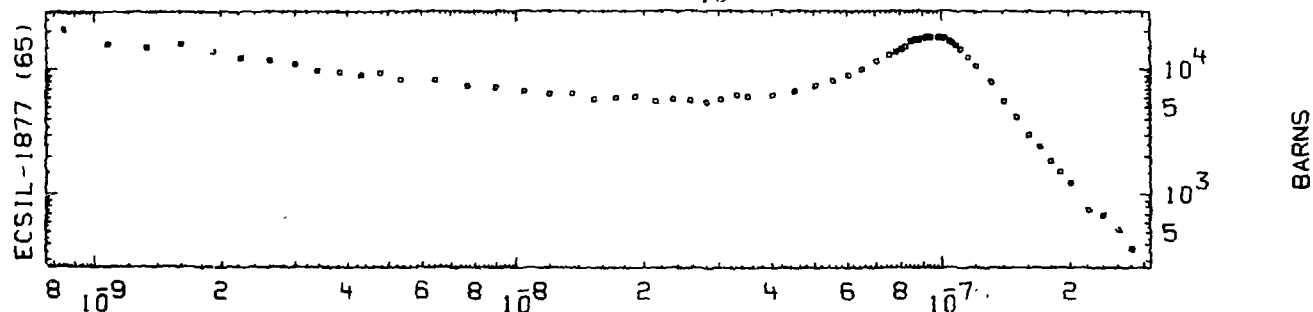
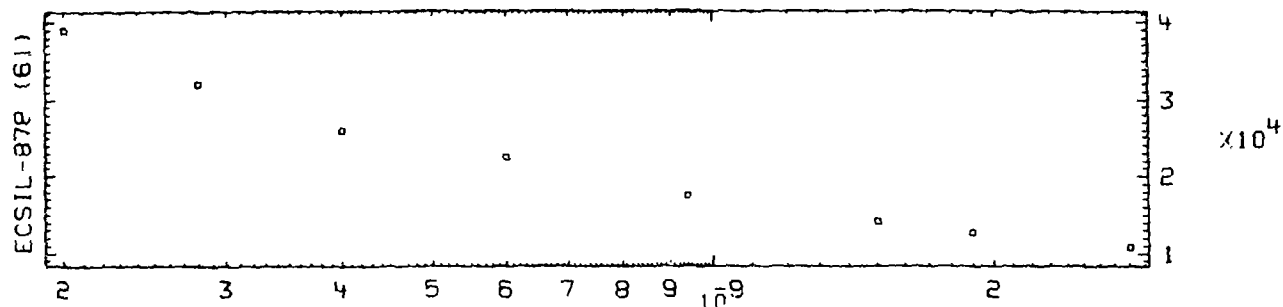
61-PM-148

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 2227	1.0000- 5		3.5000+ 4	

03/01/74

TOTAL
CROSS SECTION

62-SM-NAT



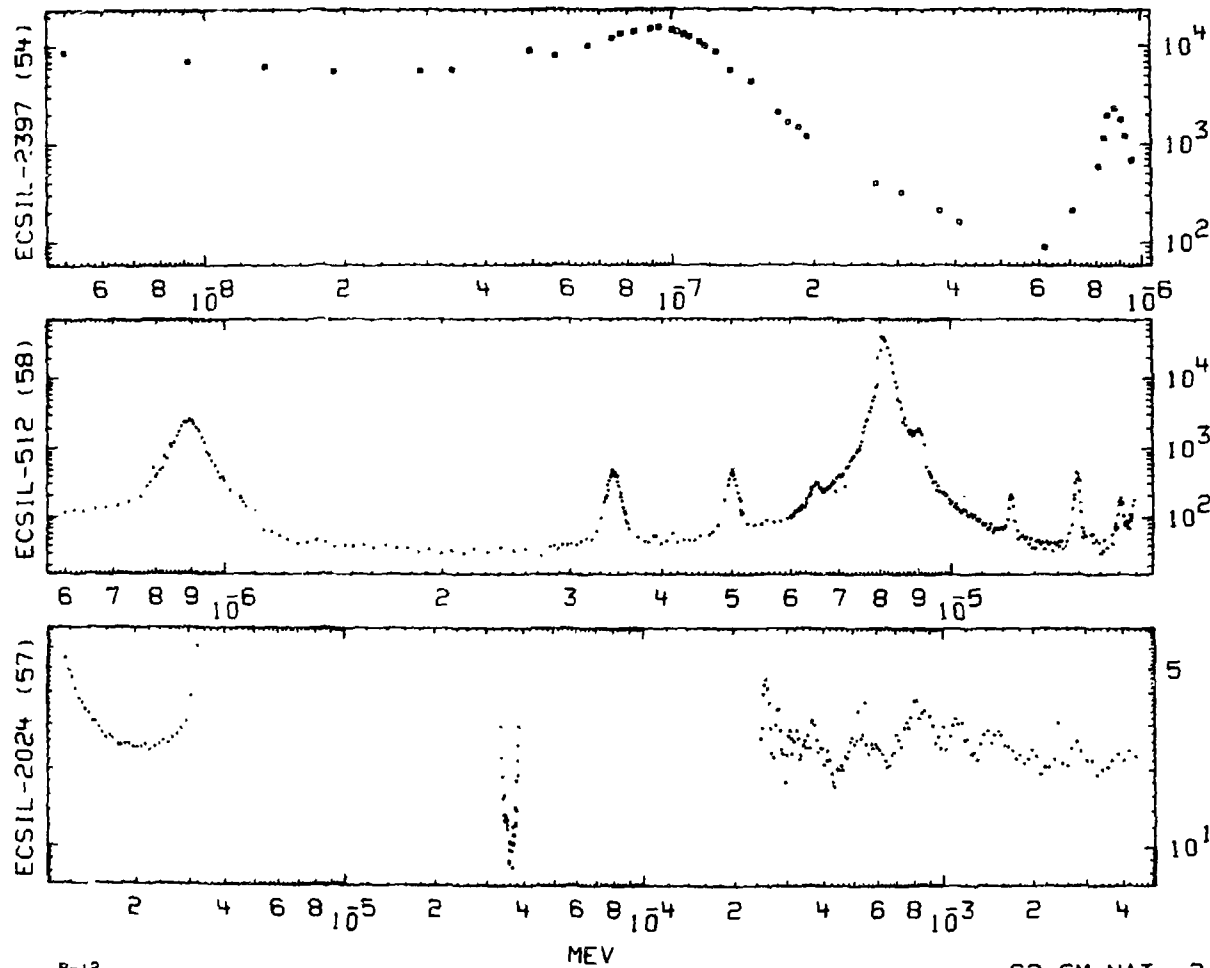
8-11

62-SM-NAT -1

03/01/74

TOTAL
CROSS SECTION

62-SM-NAT



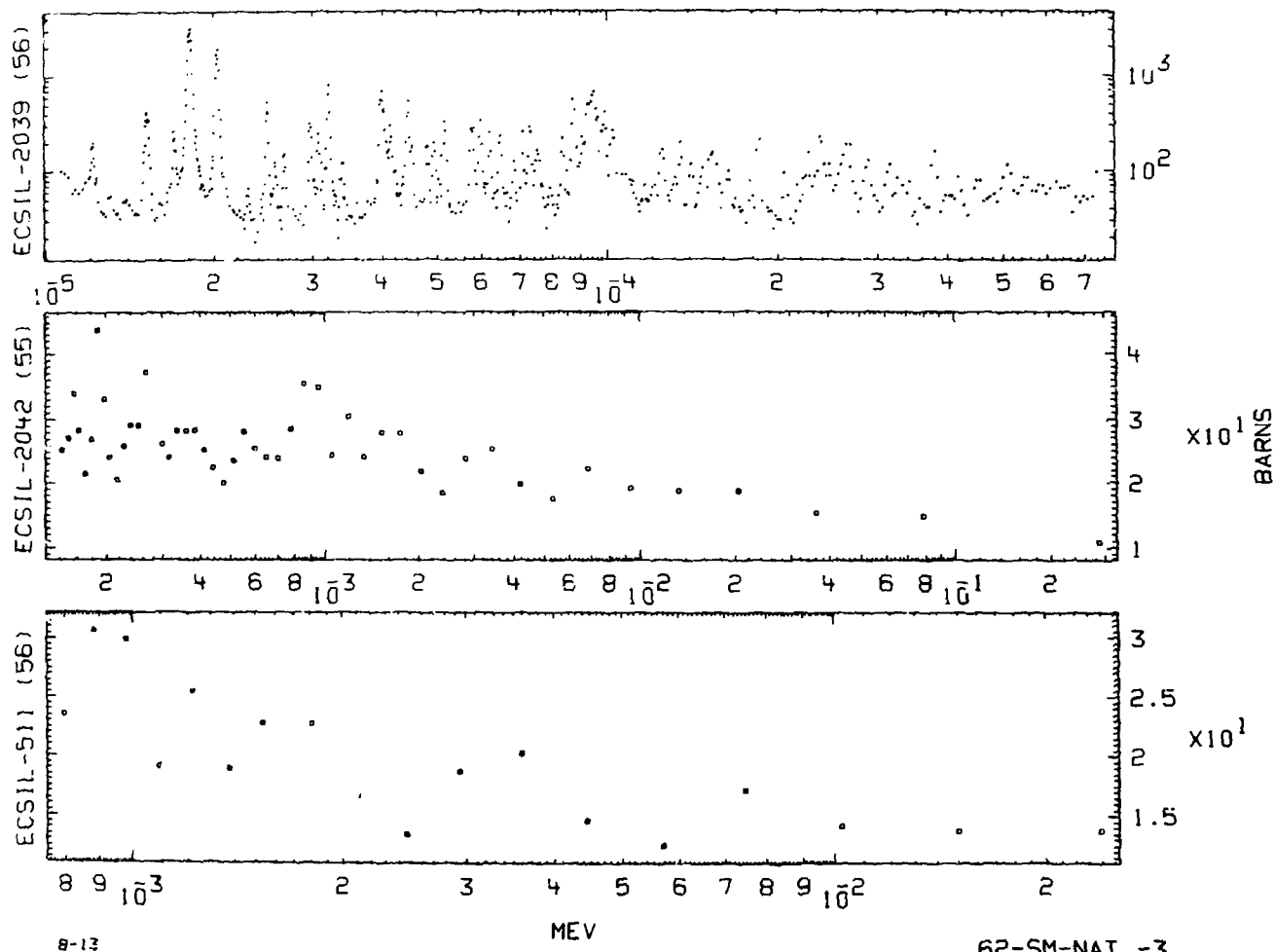
B-12

62-SM-NAT -2

03/01/74

TOTAL
CROSS SECTION

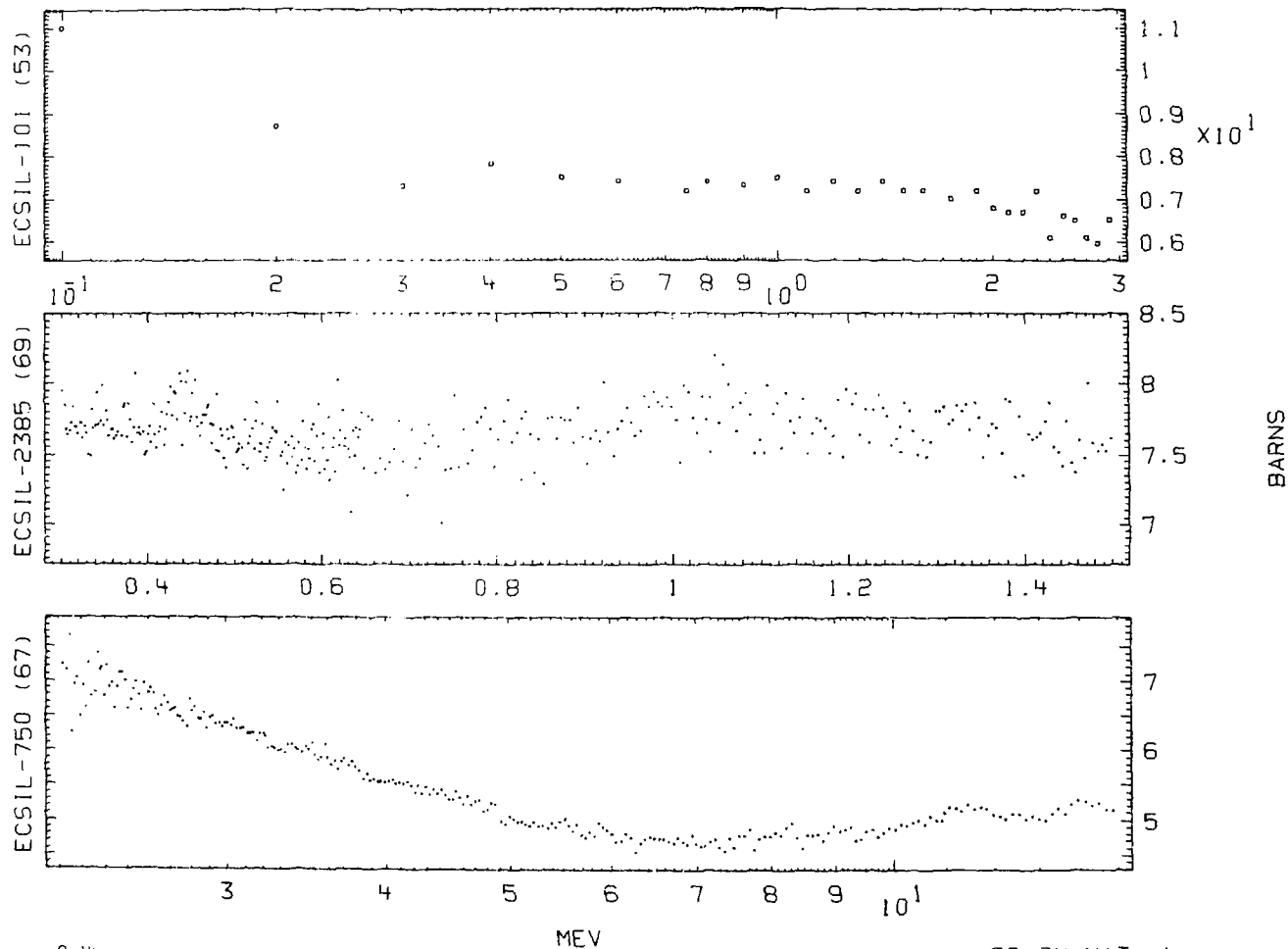
62-SM-NAT



03/01/74

TOTAL
CROSS SECTION

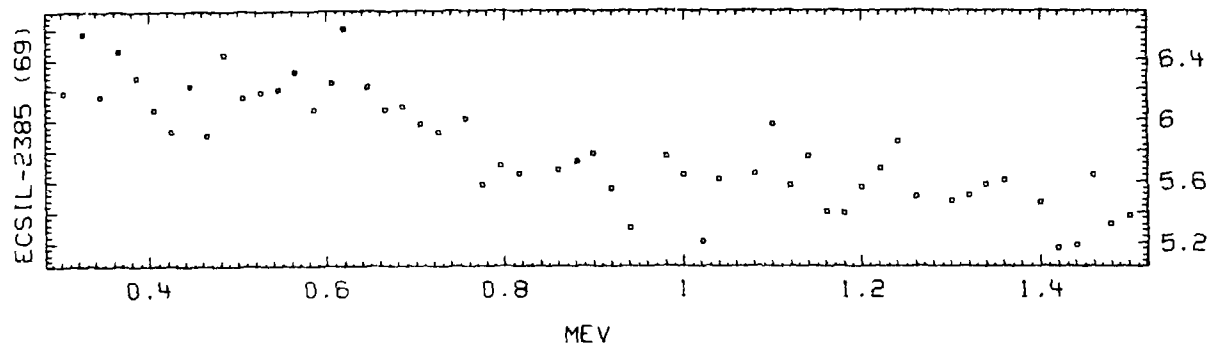
62-SM-NAT



03/01/74

ELASTIC
CROSS SECTION

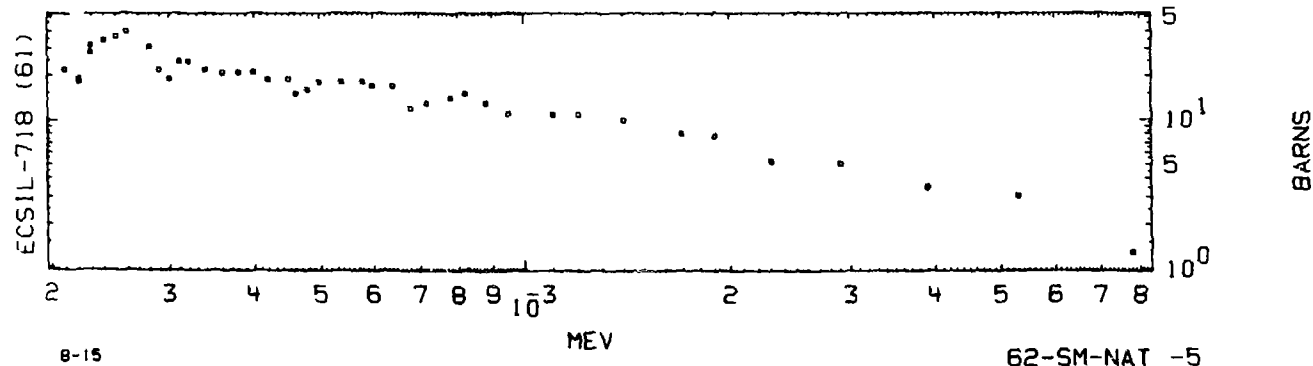
62-SM-NAT



03/01/74

N, GAMMA
CROSS SECTION

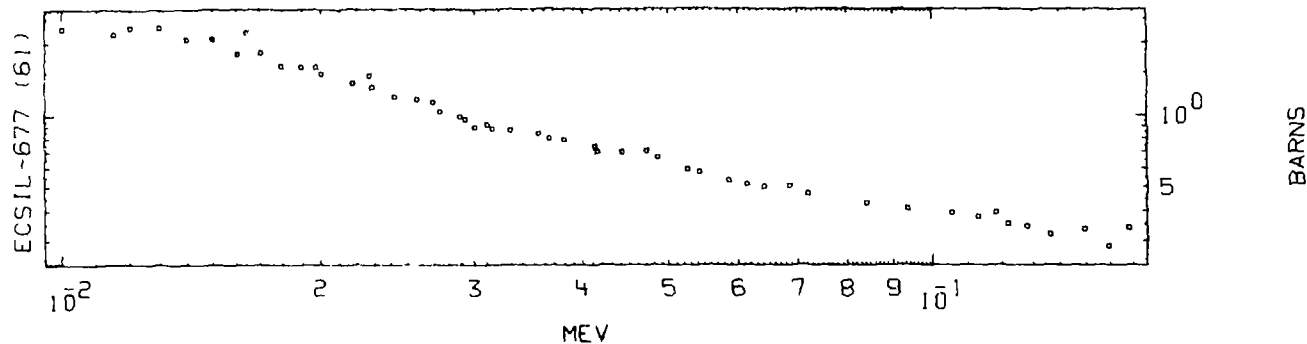
62-SM-NAT



03/01/74

N, GAMMA
CROSS SECTION

62-SM-NAT



03/01/74

TOTAL

62-SM-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 324	1.3140+ 1	5.0000- 2	5.1010+ 0	9.0010- 2
58 324	1.4100+ 1	4.0000- 2	5.1410+ 0	8.0010- 2
58 324	1.5600+ 1	1.3000- 1	5.2400+ 0	1.0000- 1

03/01/74

N, GAMMA

62-SM-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
64 895	2.5300- 8		5.8800+ 3	9.0000+ 1
64 895	2.5300- 8		5.7470+ 3	1.5000+ 2
64 895	2.5300- 8		5.7750+ 3	
63 1	3.0000- 2	8.0010- 3	8.7510- 1	7.9010- 2
63 1	6.5000- 2	2.1000- 2	4.5000- 1	4.1000- 2

03/01/74

TOTAL
CROSS SECTION

62-SM-147

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
71 3110	2.5300- 8		7.5000+ 1	6.0000+ 0

03/01/74

N, GAMMA

62-SM-147

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 2227	1.0000- 5		9.6000+ 2	1.0000+ 2

03/01/74

N, GAMMA
CROSS SECTION

62-SM-148

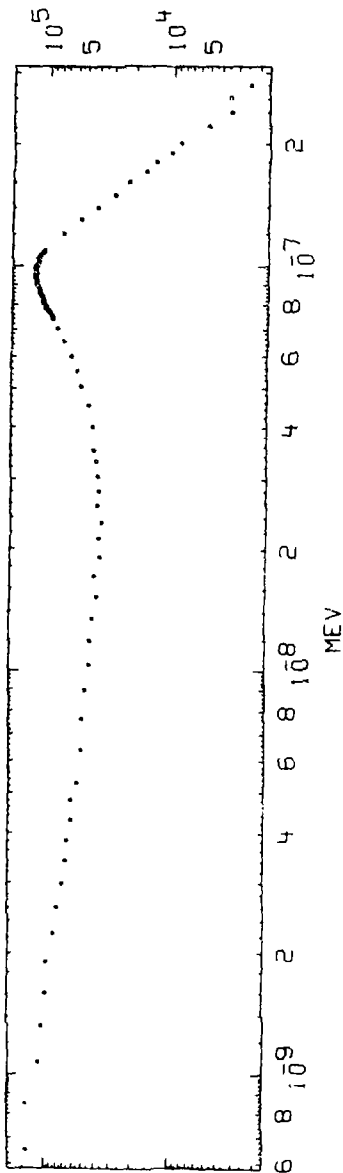
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 3306	2.5300×10^{-8}		4.7300×10^{-4}	1.1000×10^{-3}

03/01/74

62-SM-149

TOTAL
CROSS SECTION

ECSIL-1877 (65)



03/01/74

62-SM-149

N, GAMMA

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 2235	2.5300 - 8		4.9000 + 4	8.0000 + 3

03/01/74

TOTAL
CROSS SECTION

62-SM-150

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
71 3110	2.5300- 8		1.3300+ 2	8.0000+ 0

03/01/74

TOTAL
CROSS SECTION

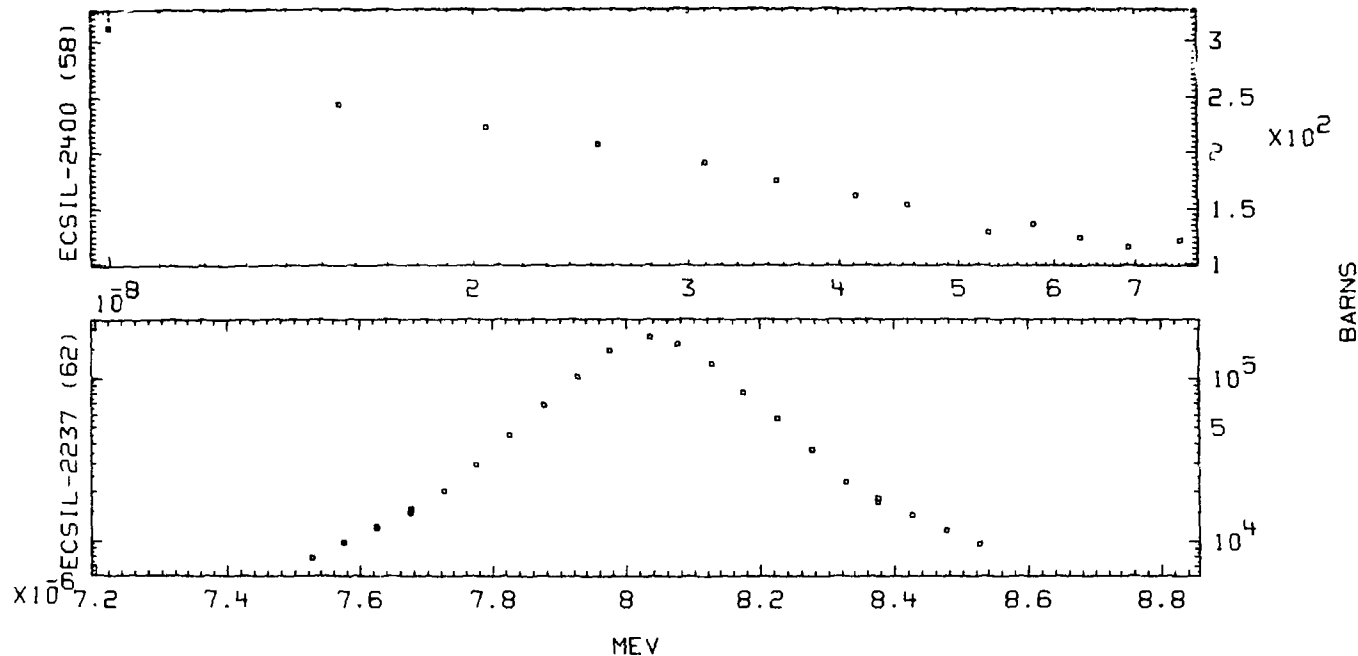
62-SM-151

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63 2544	2.5300- 8		1.5000+ 4	1.8000+ 3

03/01/74

TOTAL
CROSS SECTION

62-SM-152



03/01/74

TOTAL

62-SM-152

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 2139	2.5300- 8		2.0600+ 2	6.0000+ 0

03/01/74

N, GAMMA
CROSS SECTION

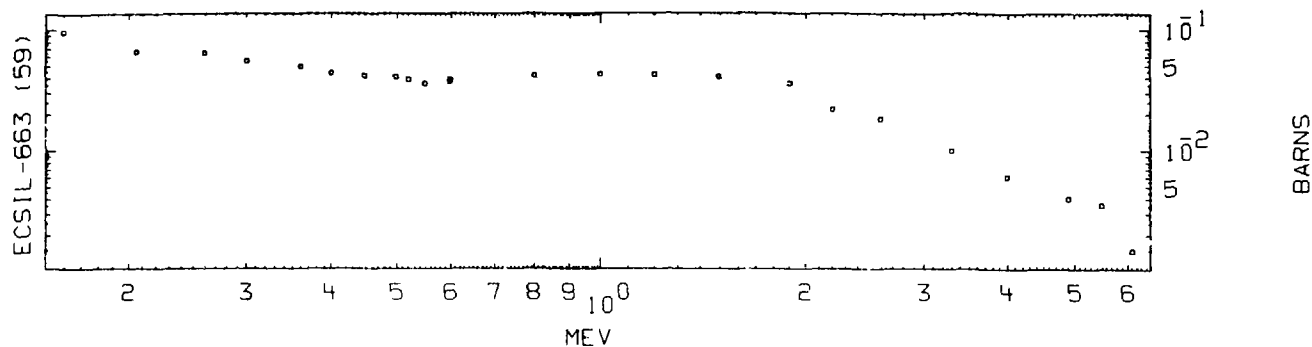
62-SM-152

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
62 2962	2.5300- 8		2.0900+ 2	9.0000+ 0
47 888	2.5300- 8		1.3800+ 2	2.7600+ 1
66 1788	2.4000- 2		5.7500- 1	6.0000- 2
57 305	2.4000- 2	5.0000- 3	6.6810- 1	1.0000- 1
59 526	1.9500- 1	1.5000- 2	1.5000- 1	2.0000- 2
67 1991	3.0000+ 0	2.0000- 1	4.4200- 2	6.6000- 3

03/01/74

N,GAMMA
CROSS SECTION

62-SM-154



03/01/74

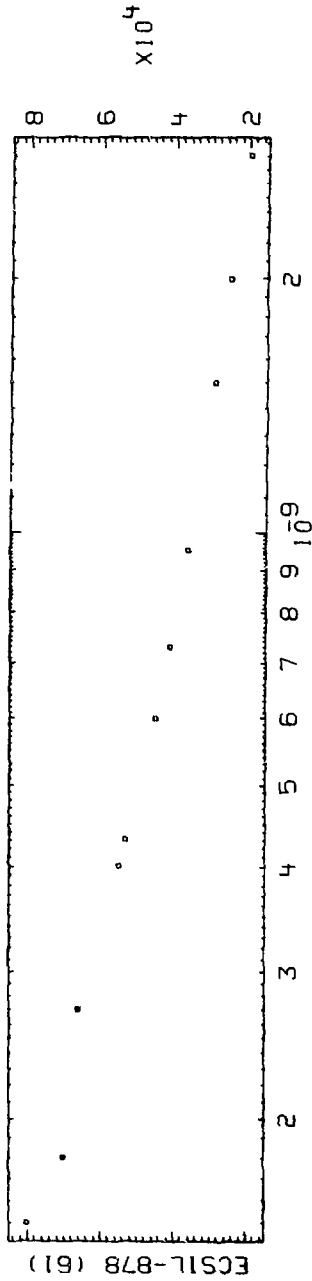
N,GAMMA

62-SM-154

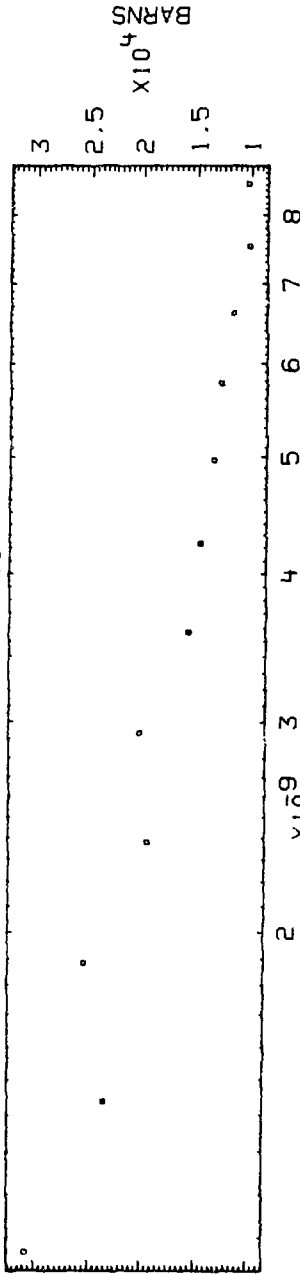
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 1788	2.4000- 2		4.6000- 1	9.5000- 2
57 305	2.4000- 2	5.0000- 3	5.2710- 1	7.0010- 2
67 1991	3.0003+ 0	2.0000- 1	1.9000- 2	5.0000- 3

03/01/74

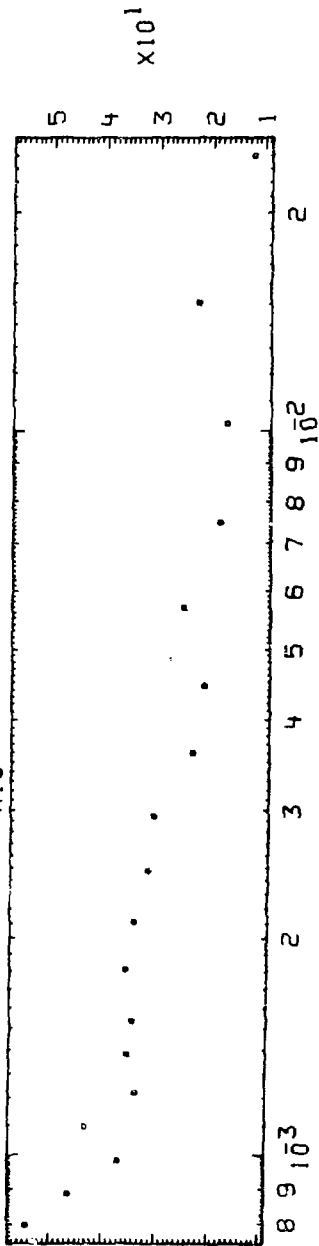
63-EU-NAT

TOTAL
CROSS SECTION

EC51L-2238 (55)



EC51L-511 (56)



B-22

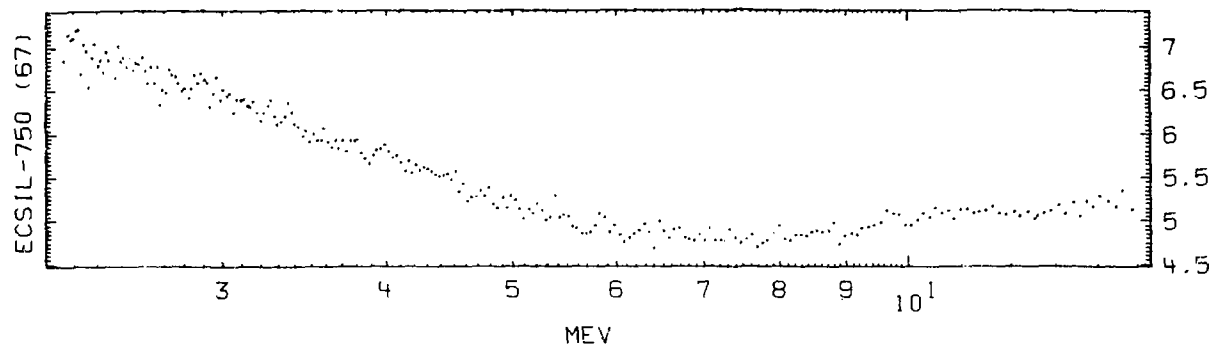
MEV

63-EU-NAT -1

03/01/74

TOTAL
CROSS SECTION

63-EU-NAT

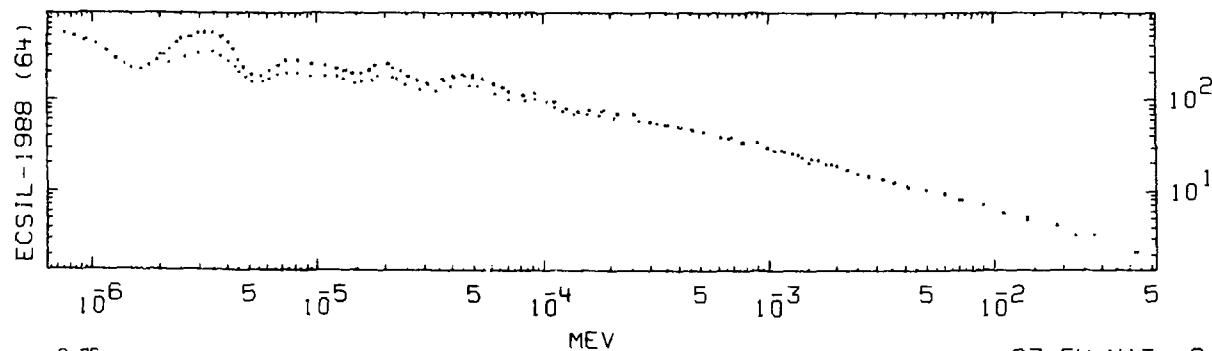


BARNs

03/01/74

N, GAMMA
CROSS SECTION

63-EU-NAT



BARNs

8-26

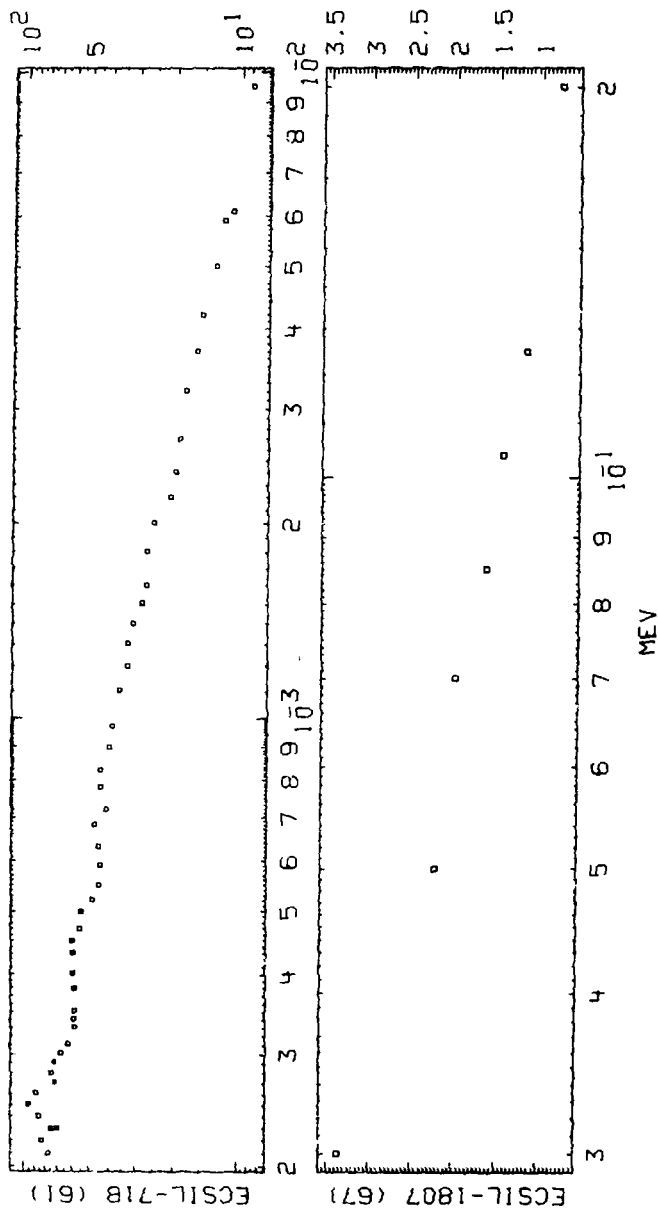
63-EU-NAT -2

03/01/74

N. GAMMA

63-EU-NAT

CROSS SECTION



03/01/74

TOTAL

63-EU-NAT

REFERENCE	ENERGY	DELTA	X-SEC	DELTA
	MEV	MEV	BARNs	BARNs
58	2139	2.5300 - 8	3.9200 + 3	4.5000 + 1

03/01/74

N. GAMMA
CROSS SECTION

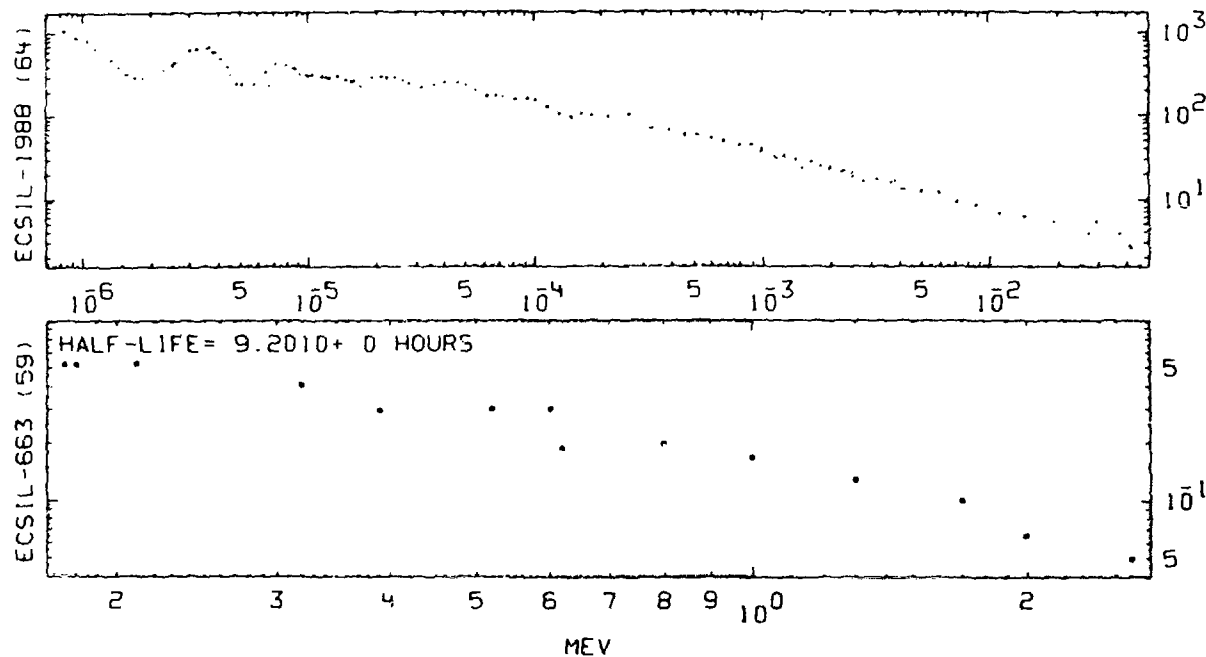
63-EU-NAT

REFERENCE	ENERGY		DELTA		X-SEC		DELTA	
		MEV		MEV		BARNS		BARNS
63	1	3.0000-	2	8.0010-	3	2.5600+	0	2.3000-
63	1	6.5000-	2	2.1000-	2	1.5800+	0	1.4000-

03/01/74

N, GAMMA
CROSS SECTION

63-EU-151



03/01/74

TOTAL

63-EU-151

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN'S	DELTA BARN'S
58 2139	2.5300- 8		7.7000+ 3	0.0000+ 1

03/01/74

N, GAMMA
CROSS SECTION

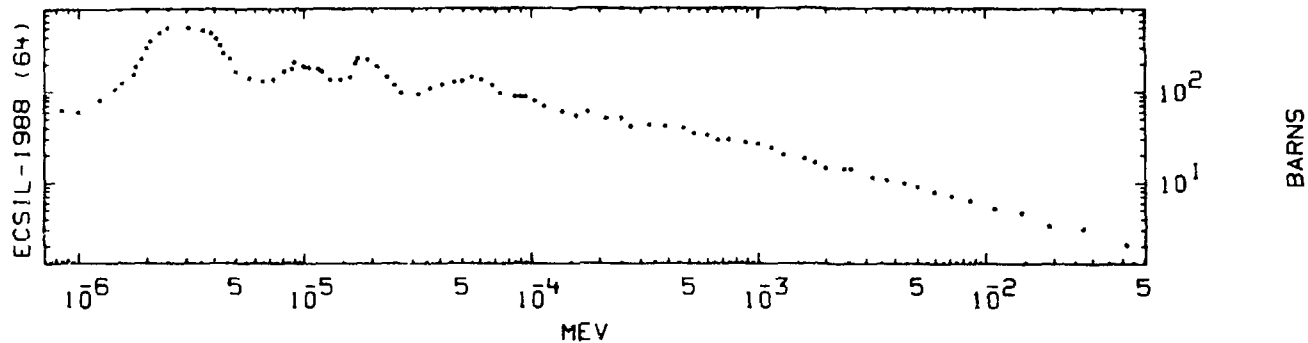
63-EU-151

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
47 888	2.5300- 8		1.3800+ 3	2.7600+ 2

03/01/74

N, GAMMA
CROSS SECTION

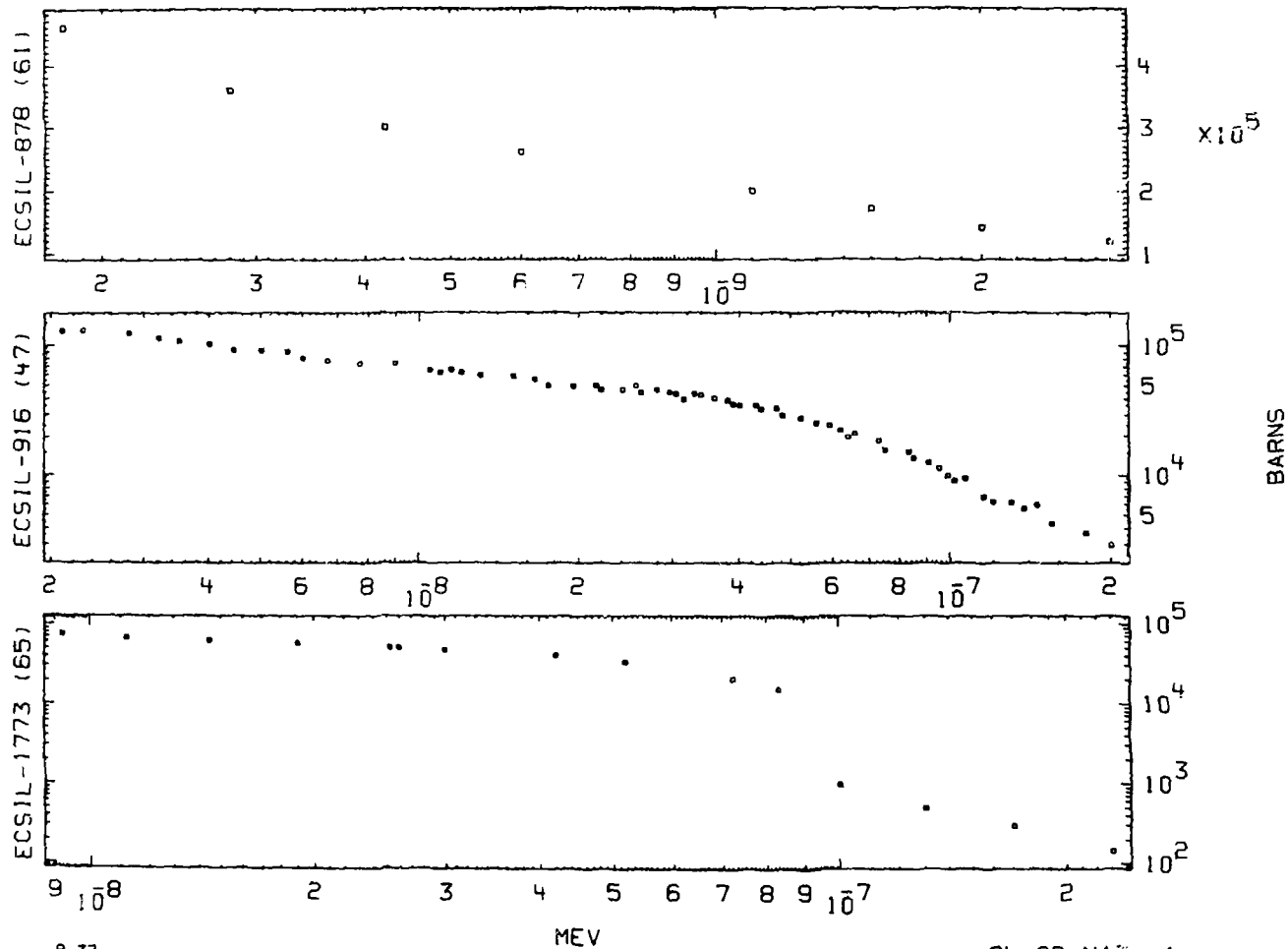
63-EU-153



03/01/74

TOTAL
CROSS SECTION

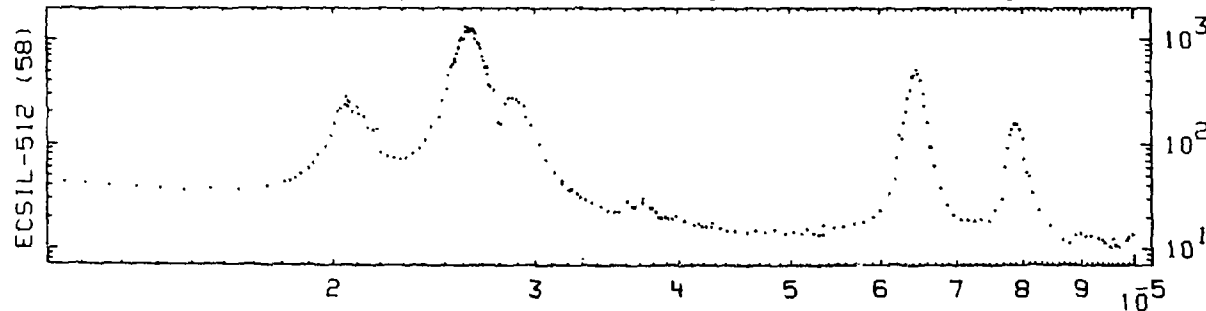
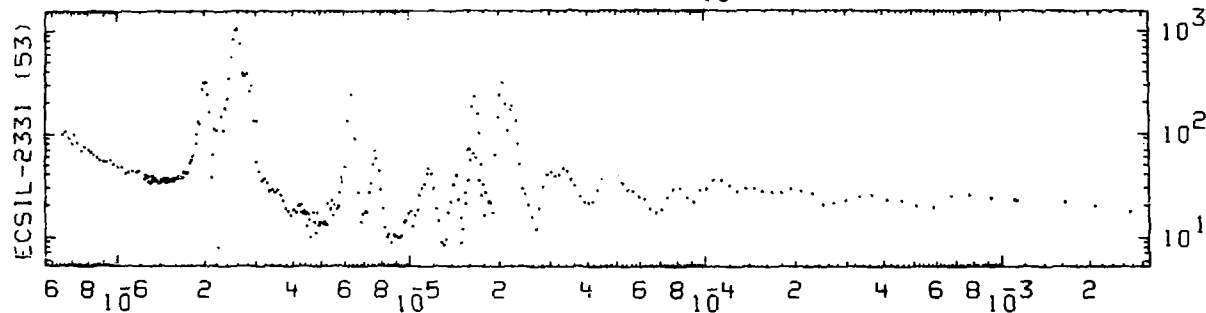
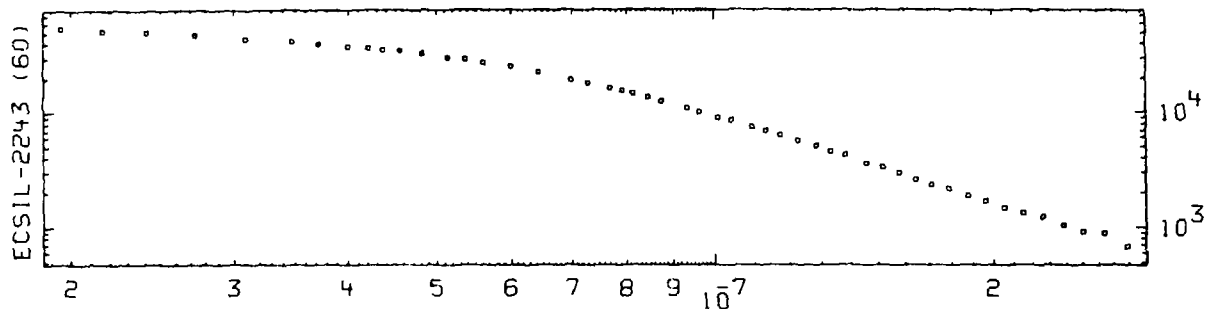
64-GD-NAT



03/01/74

TOTAL CROSS SECTION

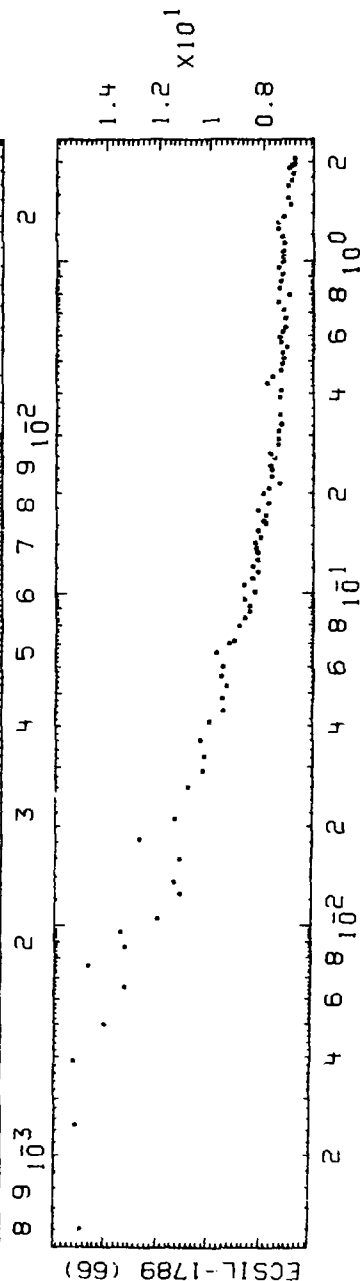
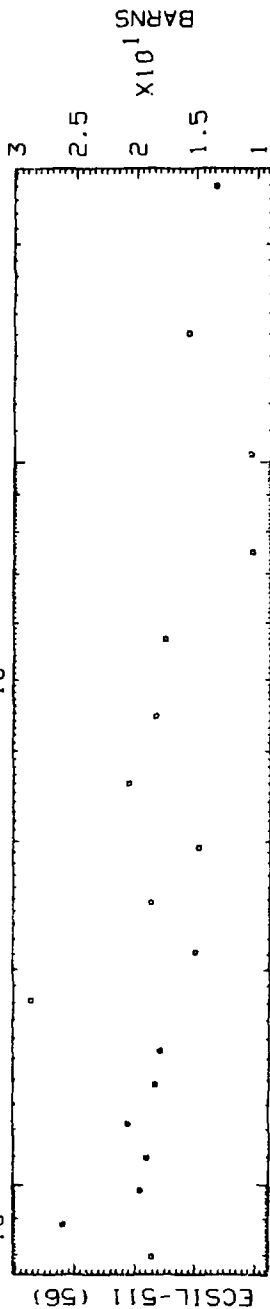
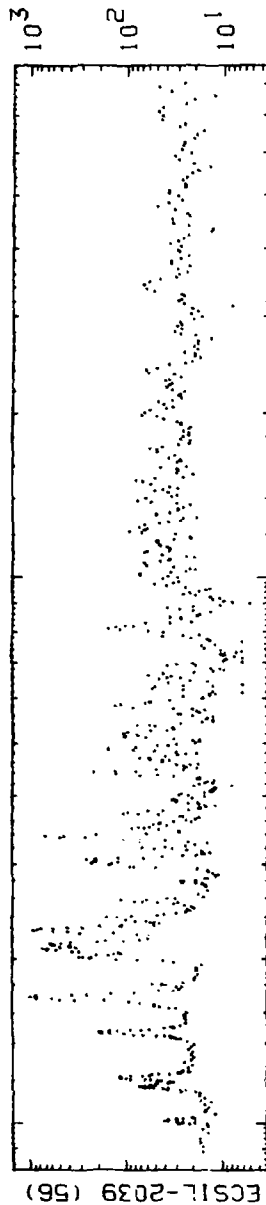
54-GD-NAT



BARNs

03/01/74

64-GD-NAT

TOTAL
CROSS SECTION

8-34

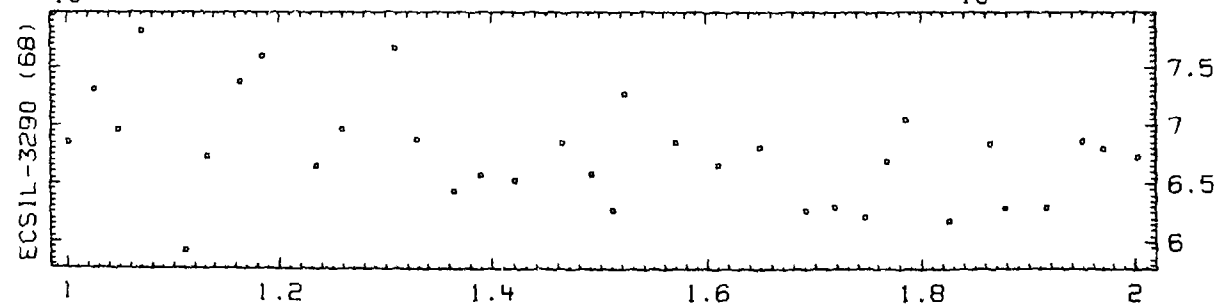
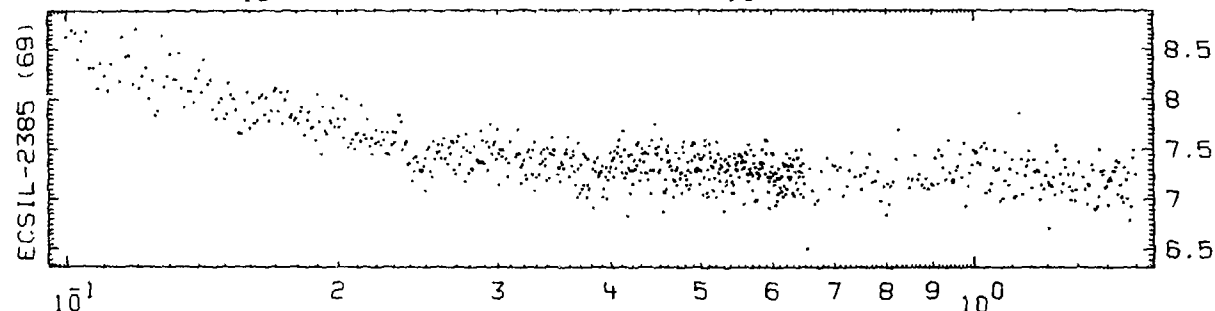
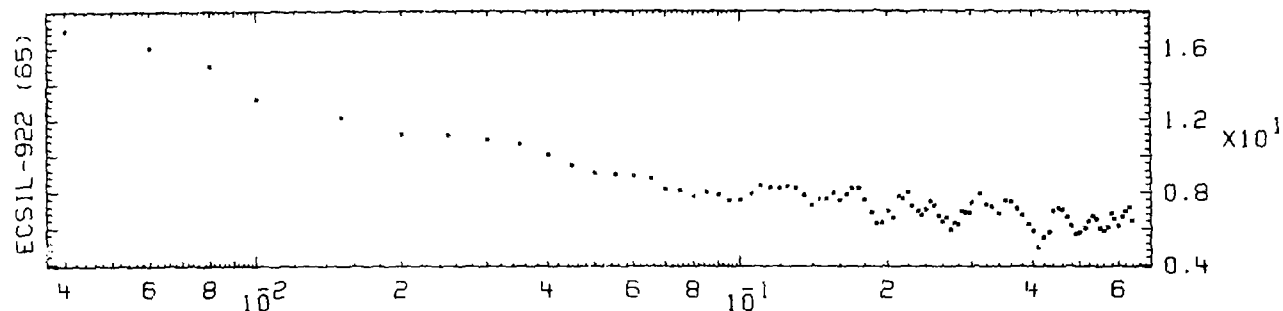
MEV

64-GD-NAT -3

03/01/74

TOTAL
CROSS SECTION

64-GD-NAT



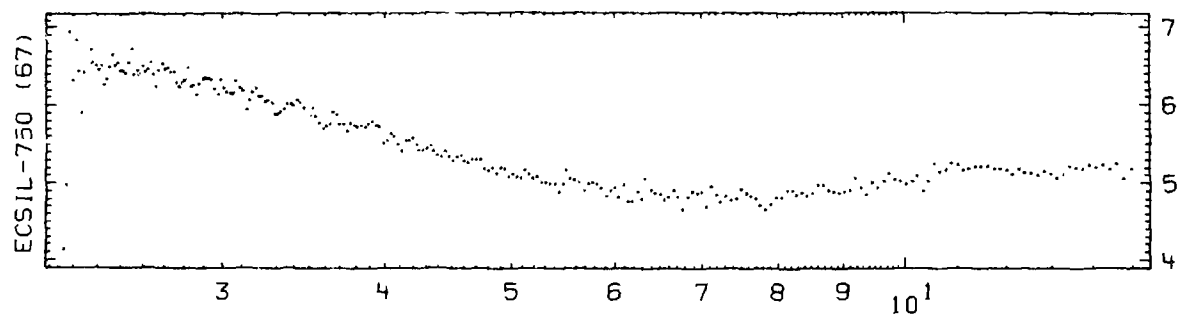
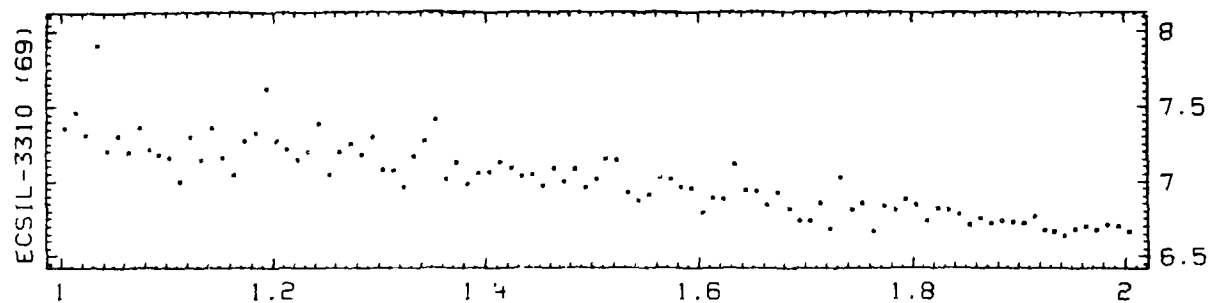
8-35

64-GD-NAT -4

03/01/74

TOTAL
CROSS SECTION

64-GD-NAT



8-36

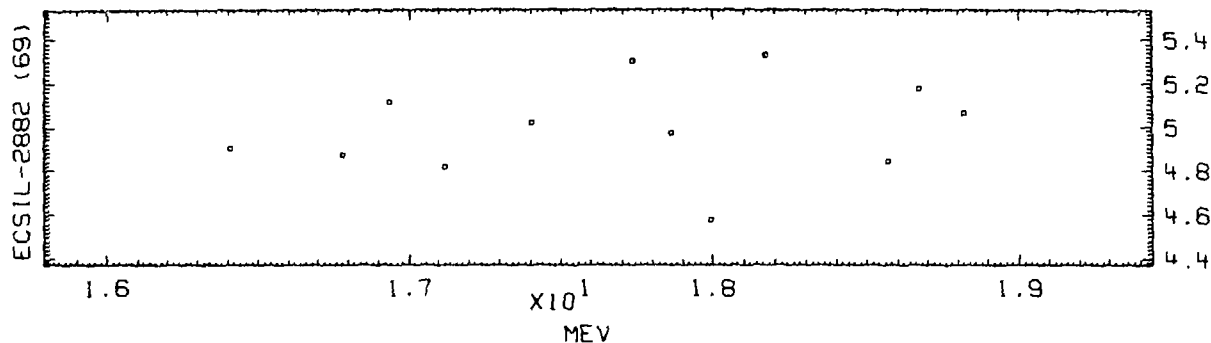
MEV

64-GD-NAT -5

03/01/74

TOTAL
CROSS SECTION

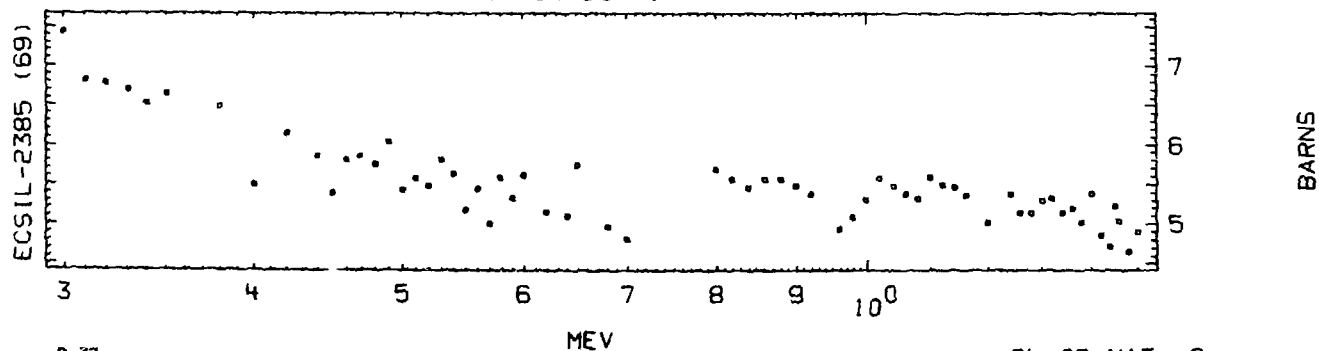
64-GD-NAT



03/01/74

ELASTIC
CROSS SECTION

64-GD-NAT



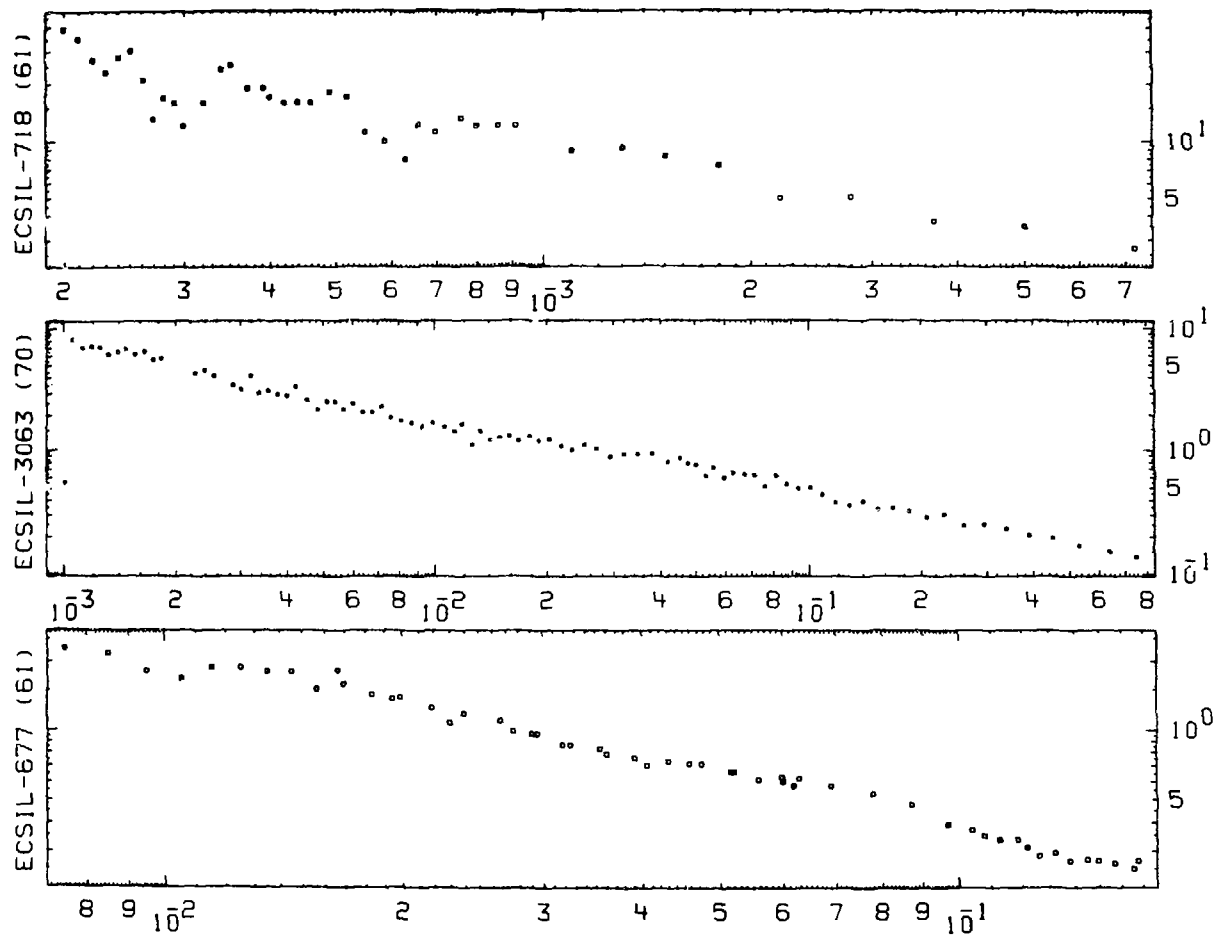
8-37

64-GD-NAT -6

03/01/74

N, GAMMA
CROSS SECTION

64-GD-NAT



BARNs

03/01/74

TOTAL
CROSS SECTION

64-GD-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 2139	2.5300- 8		5.1000+ 4	1.0000+ 3
52 252	2.8000- 3		2.7000+ 1	
58 324	1.3140+ 1	5.0000- 2	5.3310+ 0	3.0000- 2
58 324	1.4100+ 1	4.0000- 2	5.1410+ 0	9.0010- 2
58 324	1.5600+ 1	1.3000- 1	5.4000+ 0	1.4000- 1

03/01/74

N, GAMMA

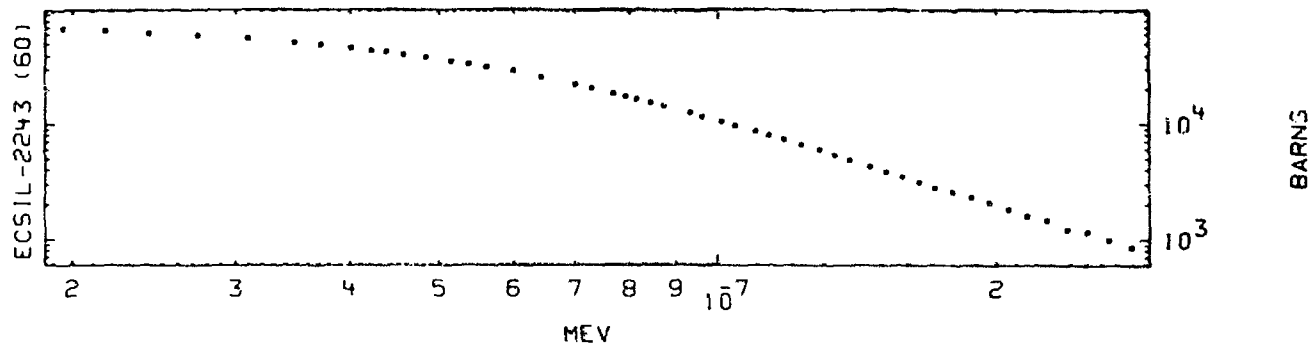
64-GD-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
64 895	2.5300- 8		4.6470+ 4	5.5000+ 2
64 895	2.5300- 8		4.7900+ 4	7.0000+ 2
63 1	3.0000- 2	8.0010- 3	1.1750+ 0	1.1000- 1
63 1	6.5000- 2	2.1000- 2	6.7010- 1	6.0010- 2
71 3194	1.4000+ 1		9.2100- 4	2.3020- 4

03/01/74

TOTAL
CROSS SECTION

64-GD-155



03/01/74

TOTAL

64-GD-155

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 2139	2.5300- 8		6.6000- 4	2.0000- 3

03/01/74

N, GAMMA

64-GD-155

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
62 2977	2.5300- 8		6.1000- 4	5.0000- 3

03/01/74

N. GAMMA
CROSS SECTION

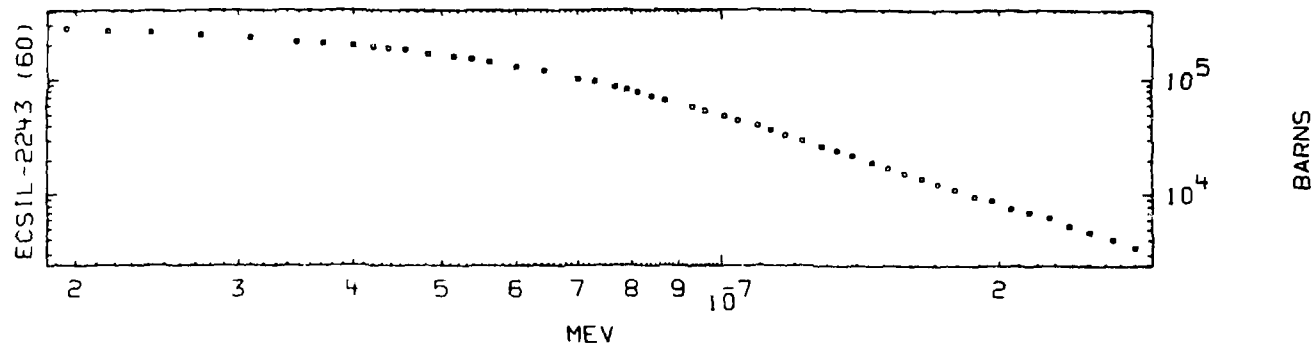
64-GD-156

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65 2247	2.5300- 8		1.3000+ 1	3.0000+ 0

03/01/74

TOTAL
CROSS SECTION

64-GD-157



03/01/74

TOTAL

64-GD-157

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 2139	2.5300- 8		2.6400+ 5	4.5000+ 3

03/01/74

N. GAMMA

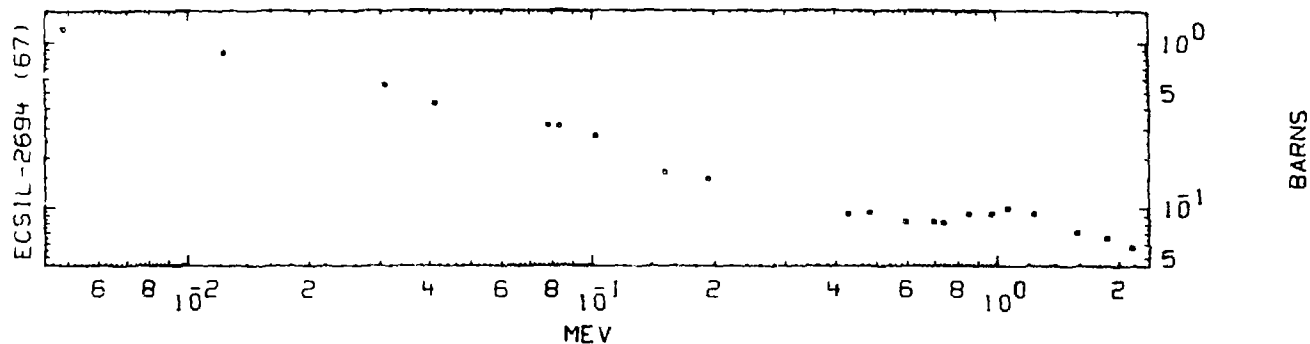
64-GD-157

REFERENCE	ENRGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
62 2977	2.5300- 8		2.4000+ 5	1.2000+ 4

03/01/74

N, GAMMA
CROSS SECTION

64-GD-158



03/01/74

N, GAMMA

64-GD-158

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 1788	2.4000- 2		5.4500- 1	1.2000- 1
57 305	2.4000- 2	5.0000- 3	7.1010- 1	7.1010- 2
59 526	1.9500- 1	1.5000- 2	1.1100- 1	1.5000- 2
67 1991	3.0000+ 0	2.0000- 1	1.0400- 2	2.0000- 3
61 701	1.4800+ 1	9.0010- 1	3.4100- 3	

03/01/74

N. GAMMA
CROSS SECTION

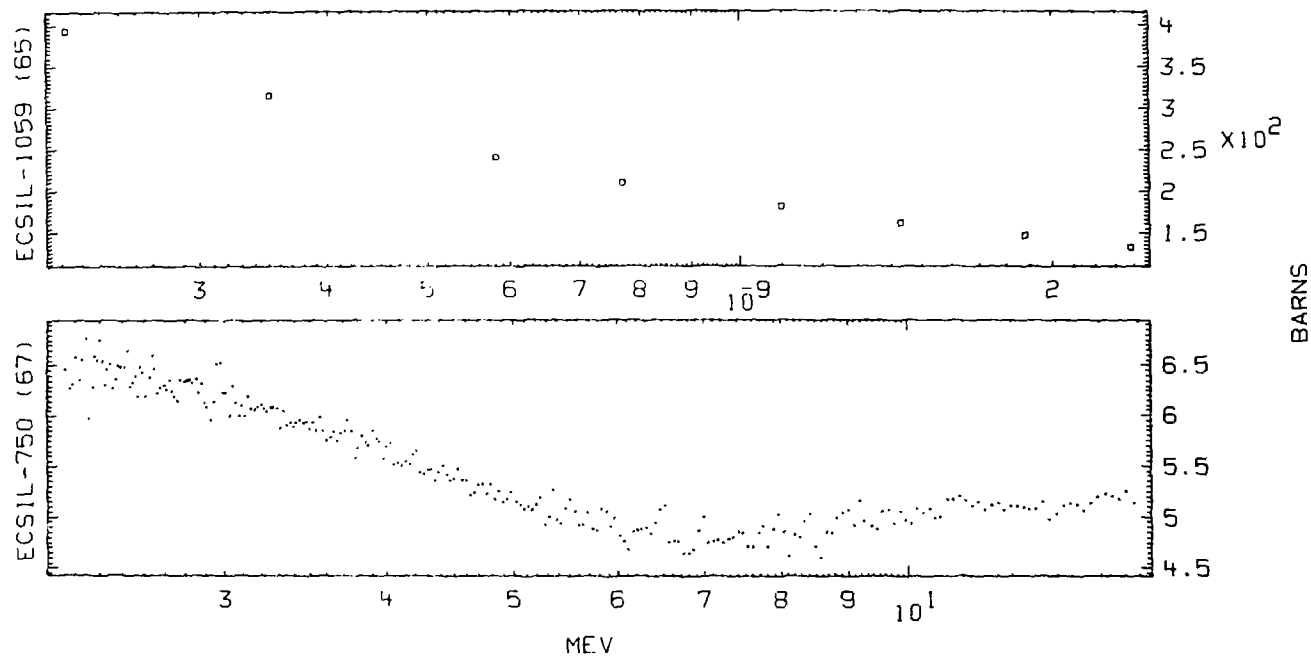
64-GD-160

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 1788	2.4000- 2		1.1000- 1	2.0000- 2
67 2602	2.8000+ 0	7.0000- 2	1.7000- 2	2.2100- 3
67 2602	2.8000+ 0	7.0000- 2	1.7000+ 1	2.2100+ 0
59 521	1.4500+ 1		1.8000- 2	5.0000- 3
60 672	1.4800+ 1	8.0010- 1	3.0000- 3	1.0000- 3

03/01/74

TOTAL
CROSS SECTION

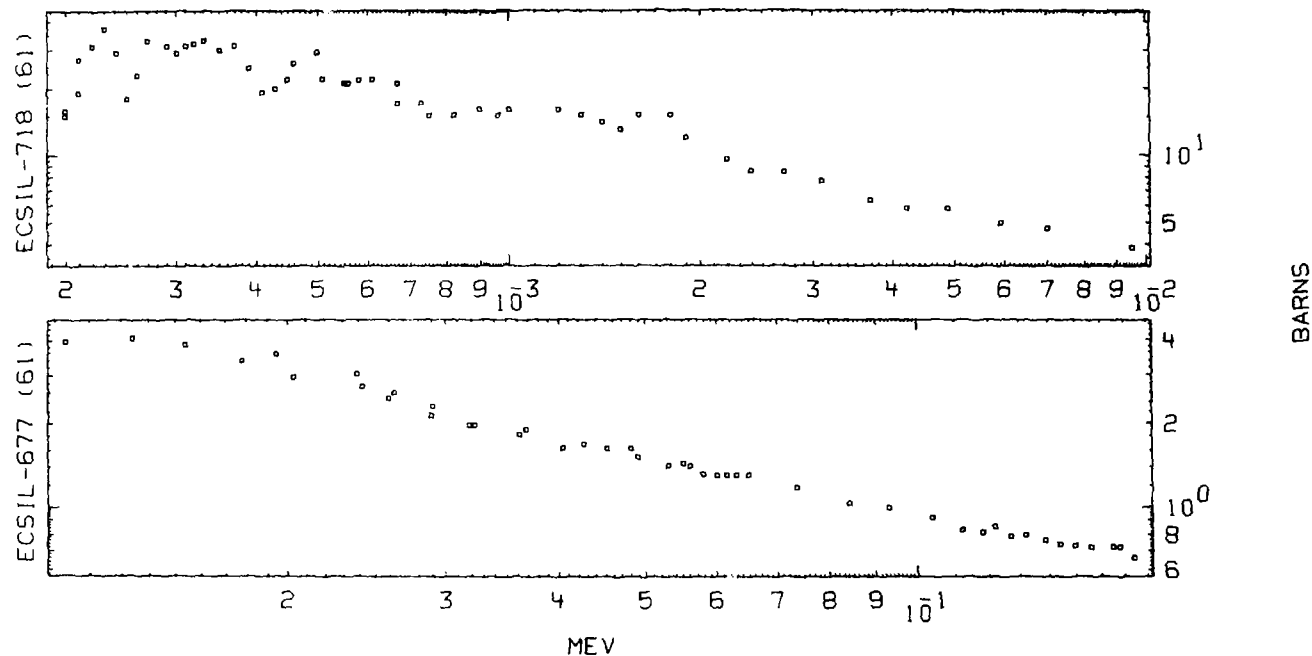
65-TB-159



03/01/74

N, GAMMA
CROSS SECTION

65-TB-159



03/01/74

N, GAMMA

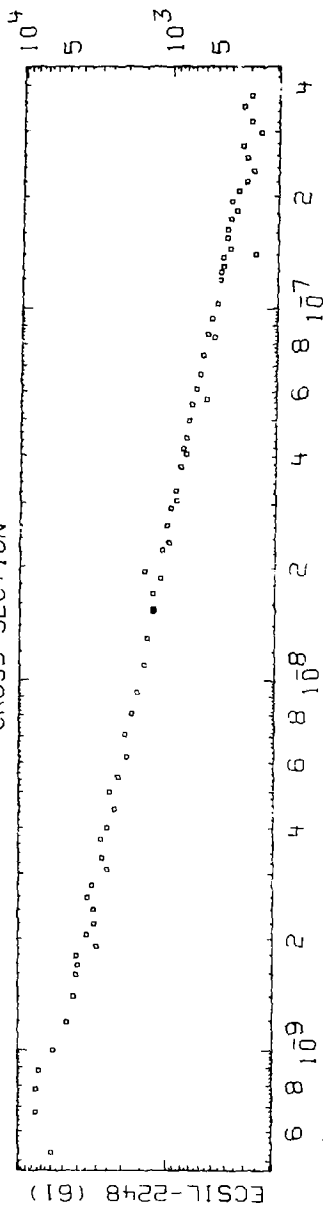
65-TB-159

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
63	1 3.0000- 2	8.0010- 3	1.8500+ 0	1.7000- 1
63	1 6.5000- 2	2.1000- 2	1.0700+ 0	9.6010- 2
67 1991	3.0000+ 0	2.0000- 1	4.9200- 2	7.0000- 3

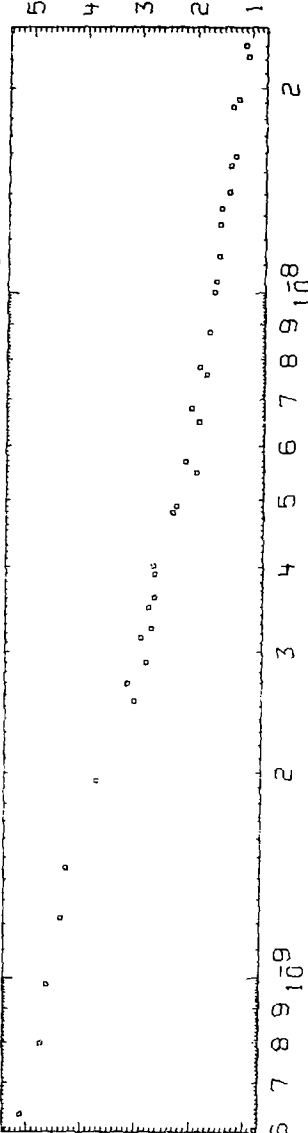
03/01/74

TOTAL
CROSS SECTION

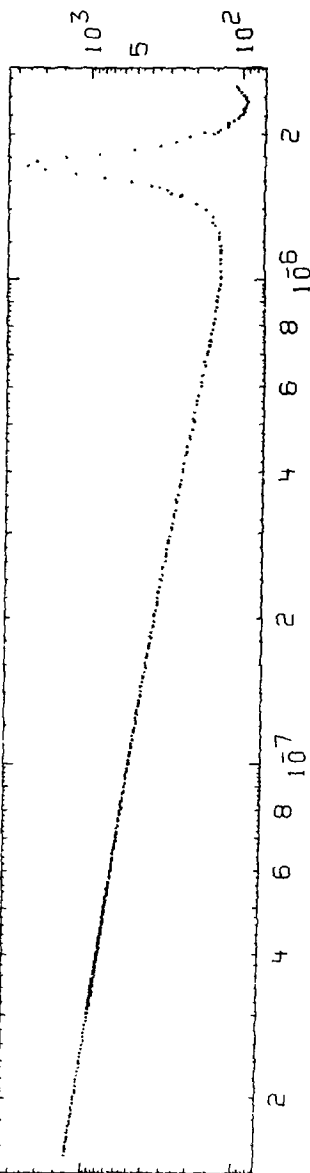
66-DY-NAT



EC51L-2249 (64)



EC51L-1553 (66)



8-47

MEV

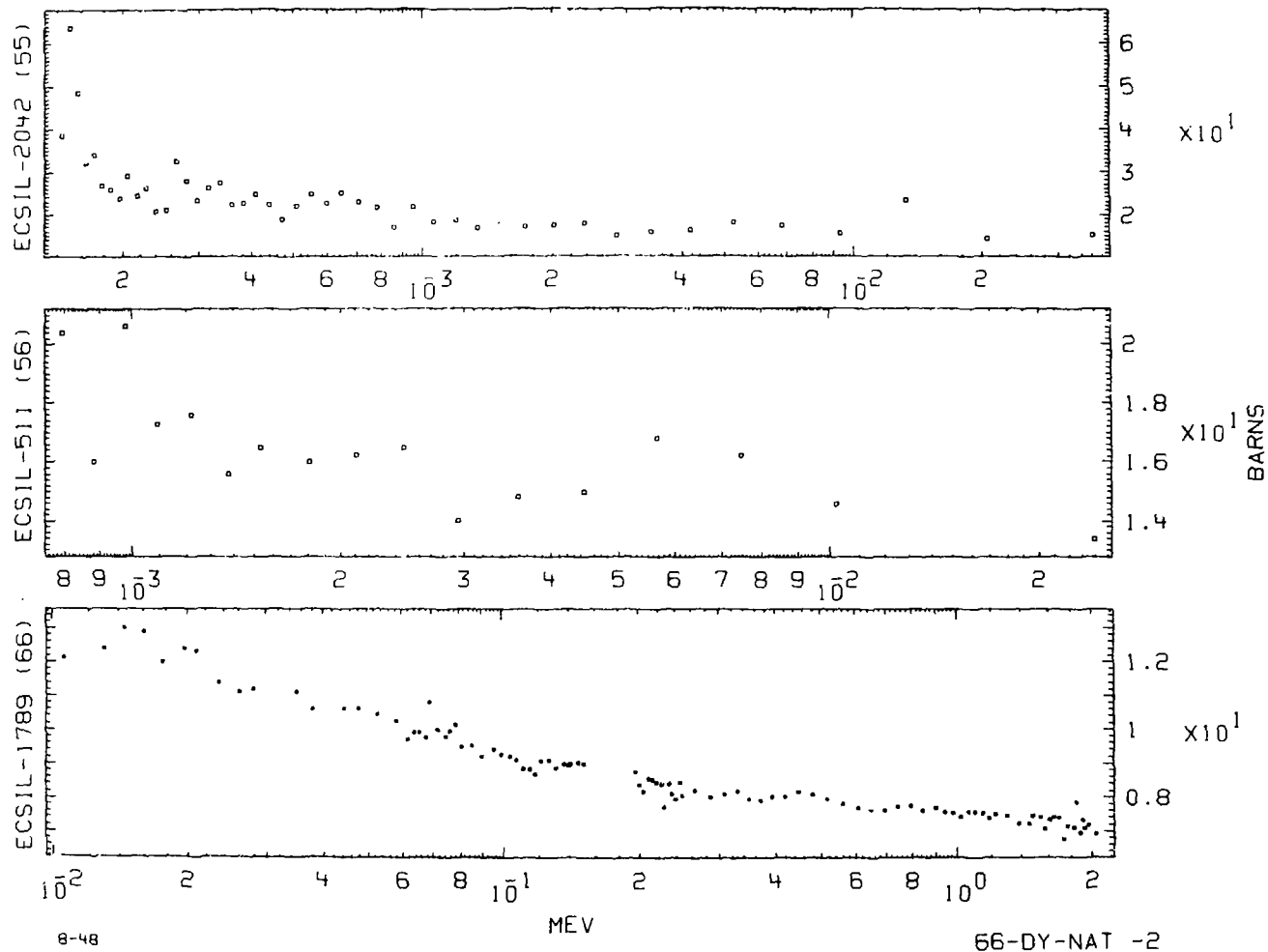
66-DY-NAT -1

BARNS
 $\times 10^3$

03/01/74

TOTAL
CROSS SECTION

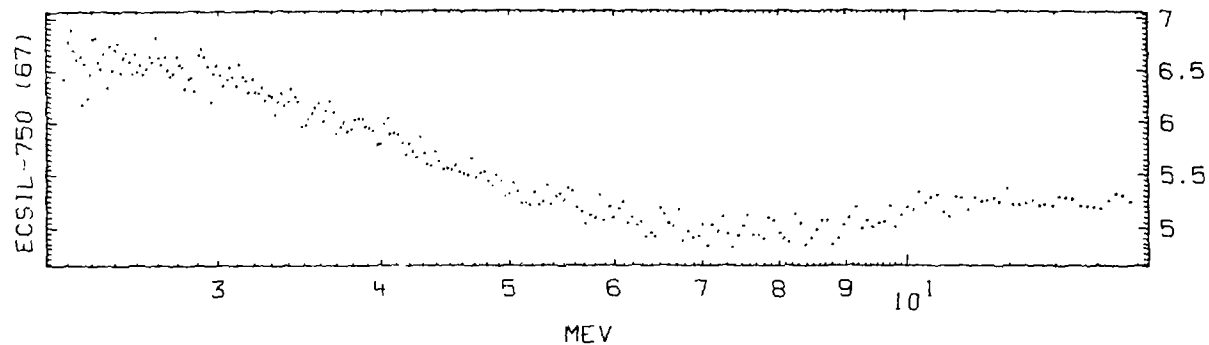
66-DY-NAT



03/01/74

TOTAL
CROSS SECTION

66-DY-NAT

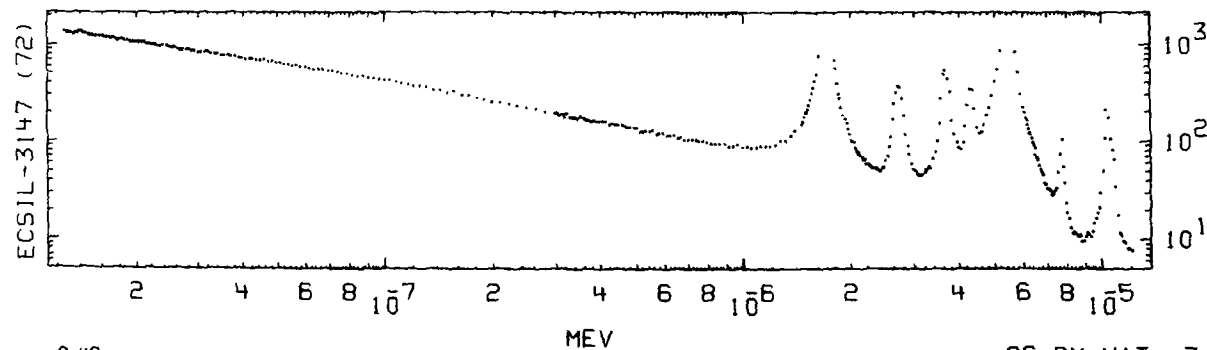


BARNs

03/01/74

N, GAMMA
CROSS SECTION

66-DY-NAT



BARNs

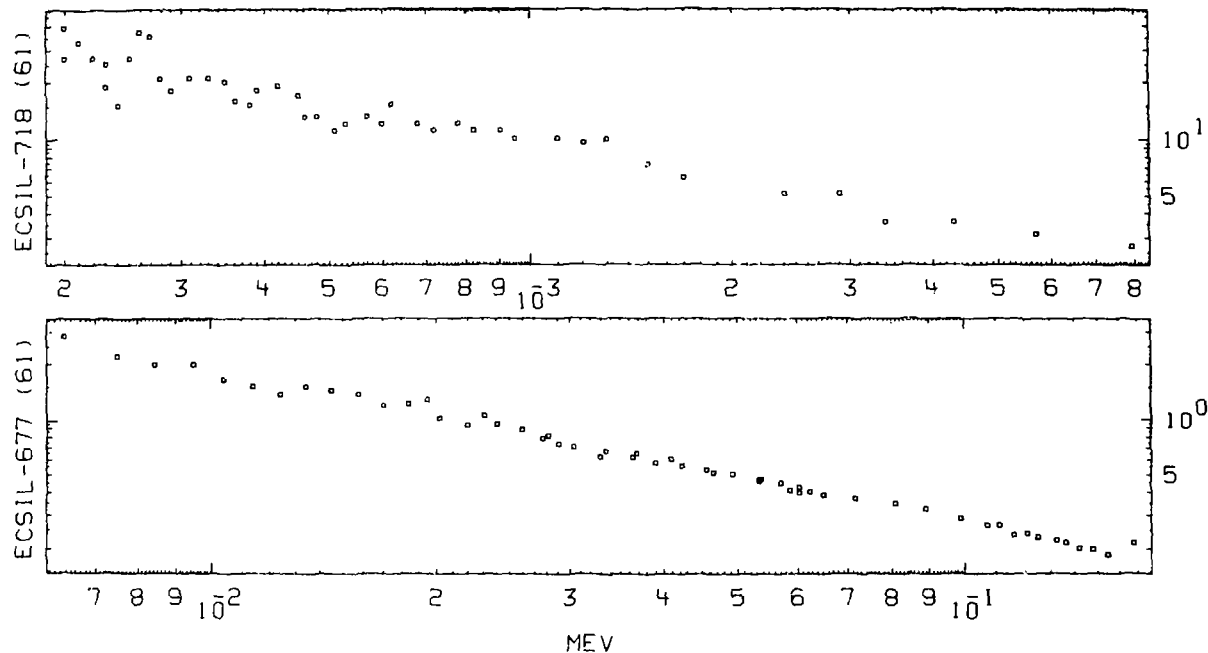
8-49

66-DY-NAT -3

03/01/74

N, GAMMA
CROSS SECTION

66-DY-NAT



03/01/74

N, GAMMA

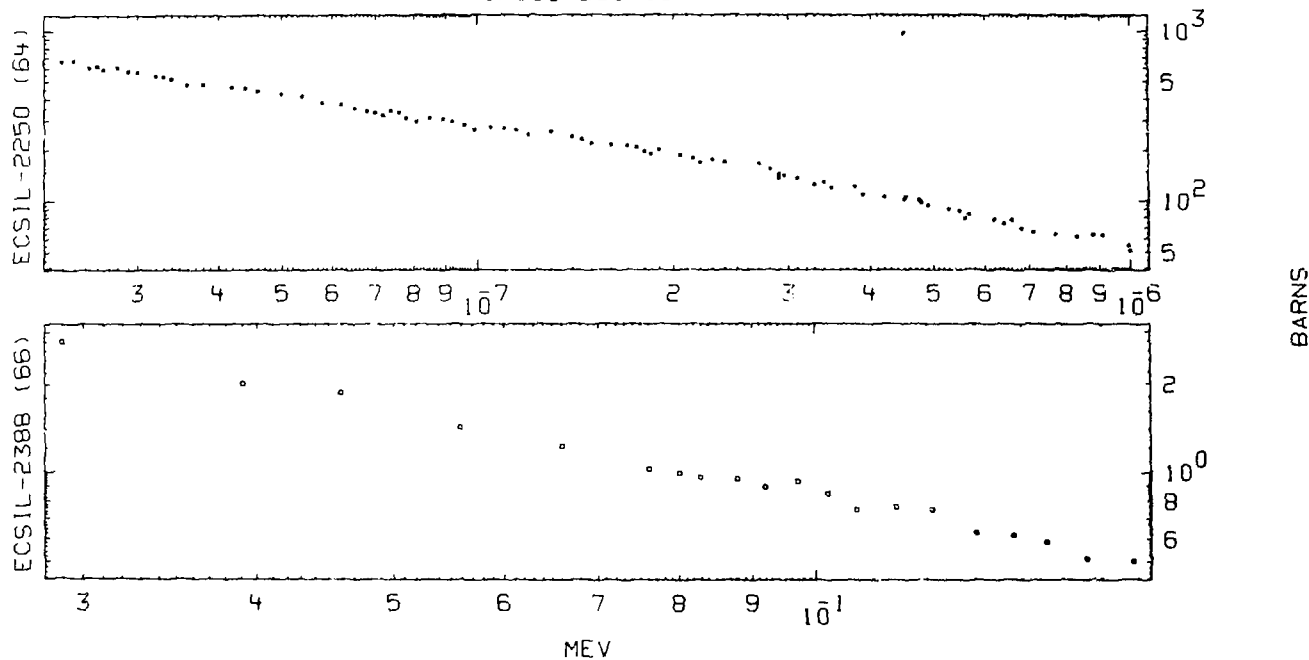
66-DY-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63	1 3.0000- 2	8.0010- 3	7.7510- 1	7.0010- 2
63	1 6.5000- 2	2.1000- 2	5.7010- 1	5.1010- 2

03/01/74

N, GAMMA
CROSS SECTION

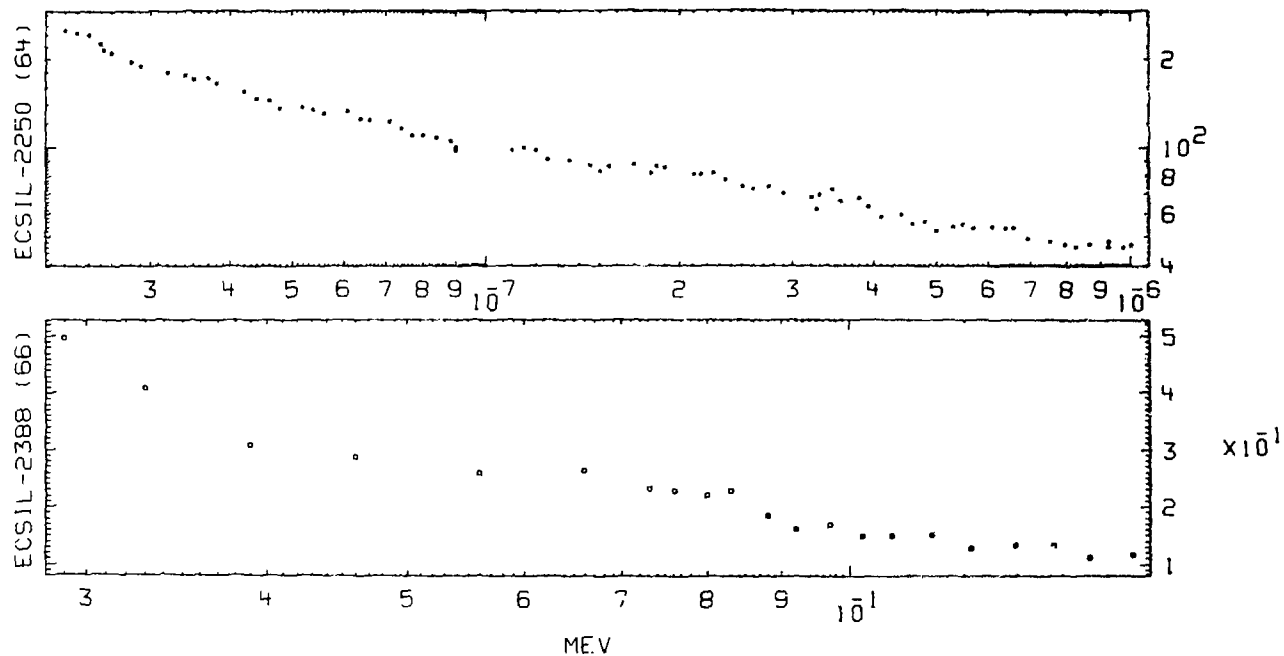
66-DY-161



03/01/74

N, GAMMA CROSS SECTION

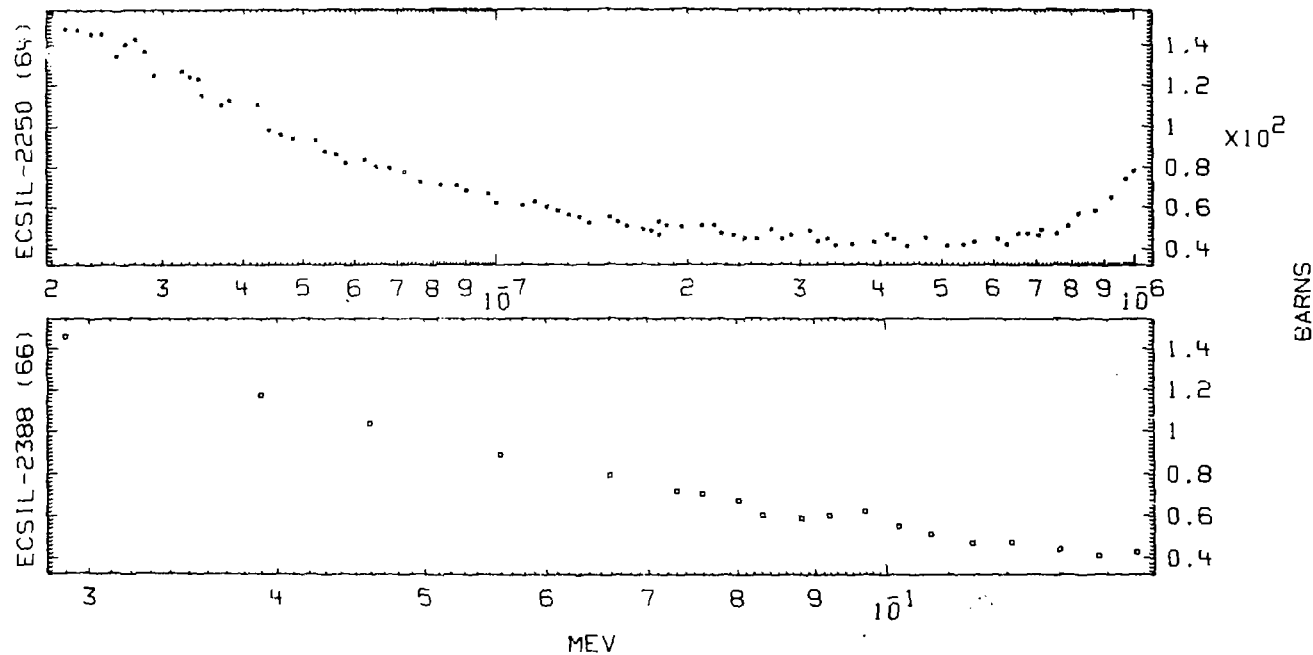
66-DY-162



03/01/74

N, GAMMA CROSS SECTION

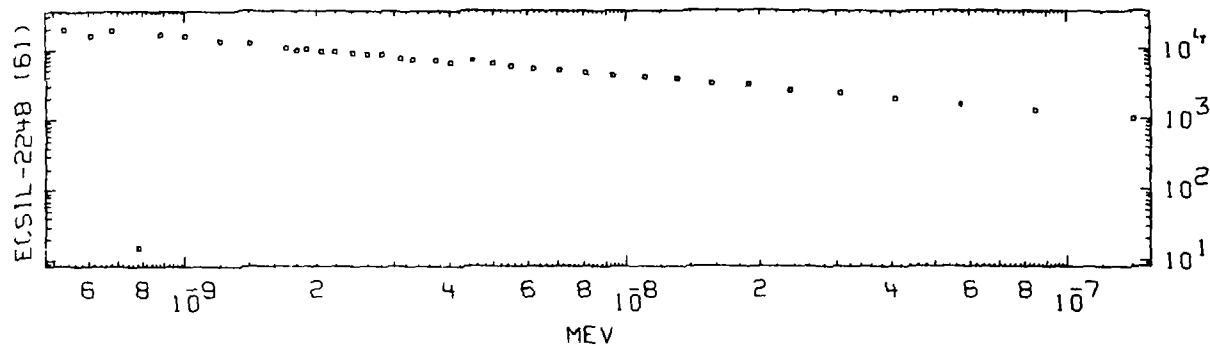
66-DY-163



03/01/74

TOTAL
CROSS SECTION

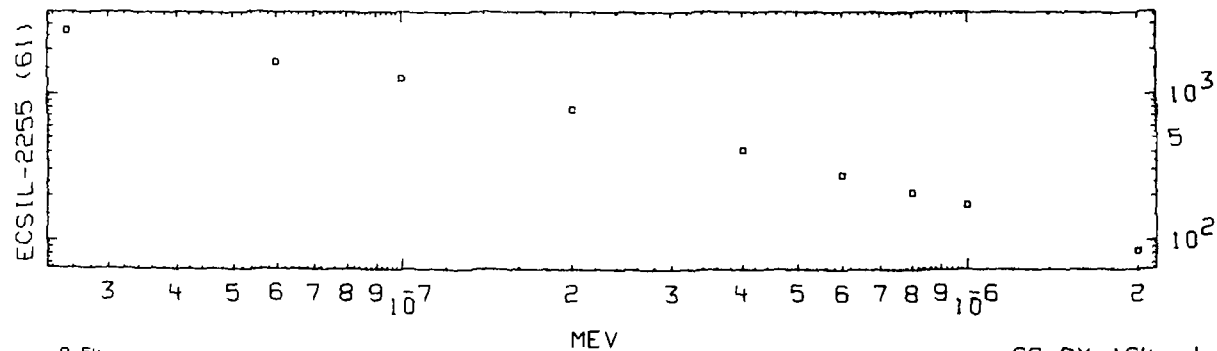
66-DY-164



03/01/74

N, GAMMA
CROSS SECTION

66-DY-164



B-54

66-DY-164 -1

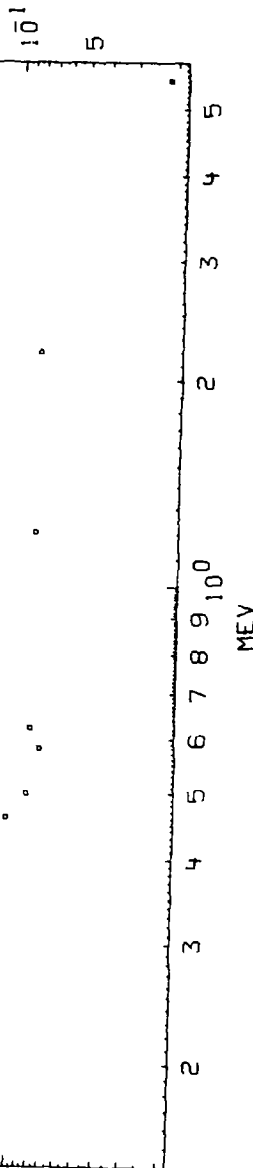
03/01/74

N, GAMMA
CROSS SECTION

66-DY-164

HALF-LIFE = 2.3200 ± 0 HOURS

ECSIL-663 (59)



03/01/74

N, GAMMA

66-DY-164

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
47	888	2.5300- 8	2.7400- 3	5.4800- 2
65	867	2.4000- 2	1.9000- 1	2.0000- 2

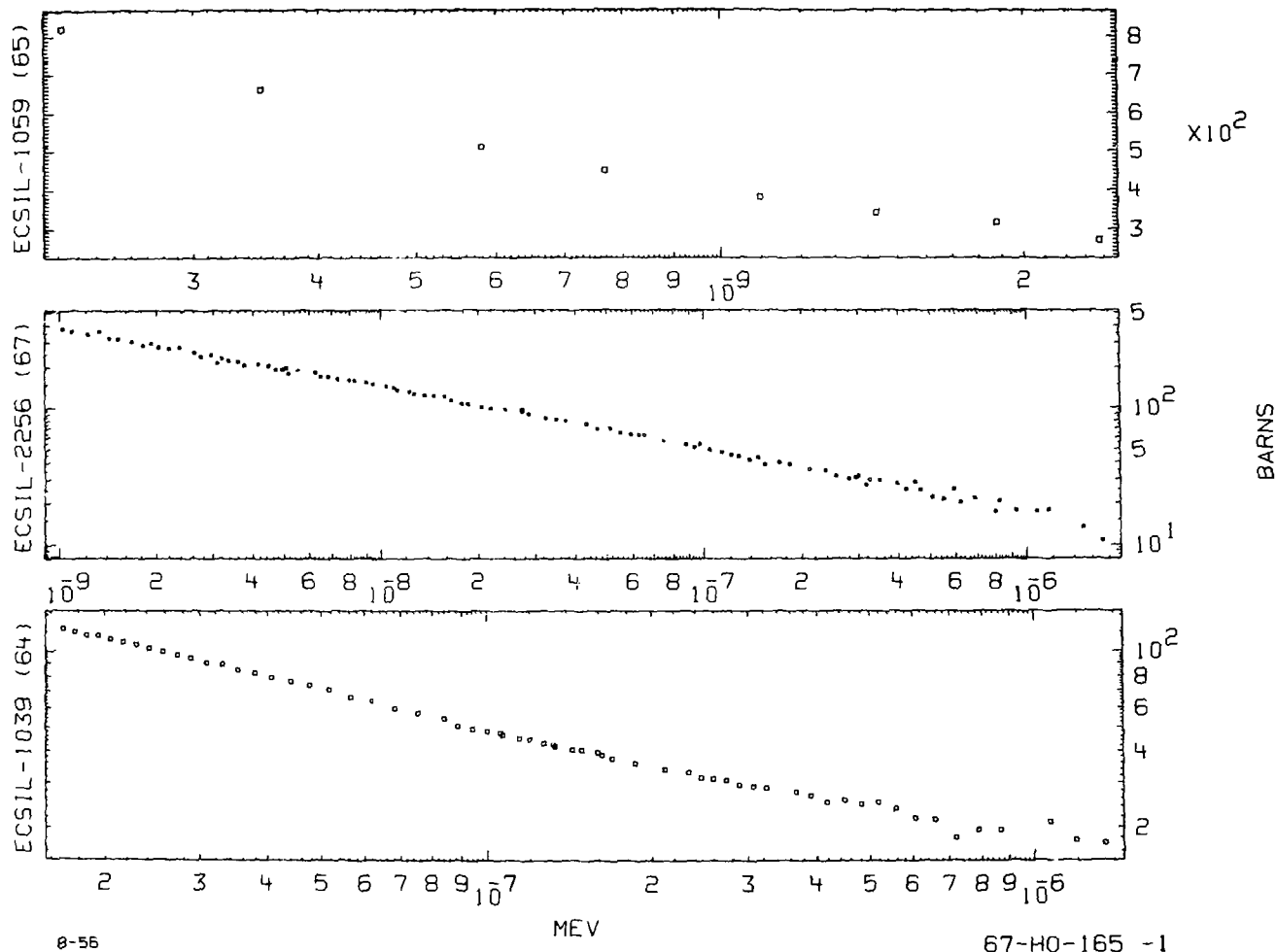
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN	HALF-LIFE MINUTES
68	2392	2.4000- 2	1.6000- 1	2.5000- 2	1.2500- 0
60	672	1.4800- 1	8.0010- 1	1.5000- 3	5.0000- 4
					1.3000- 0

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN	HALF-LIFE HOURS
57	23	2.1000- 2	4.0000- 3	3.2000- 1	1.3000- 1
60	672	1.4800- 1	8.0010- 1	3.0000- 3	2.3200- 0
68	2392	2.4000- 2	3.0000- 2	3.0000- 2	2.3200- 0

03/01/74

TOTAL
CROSS SECTION

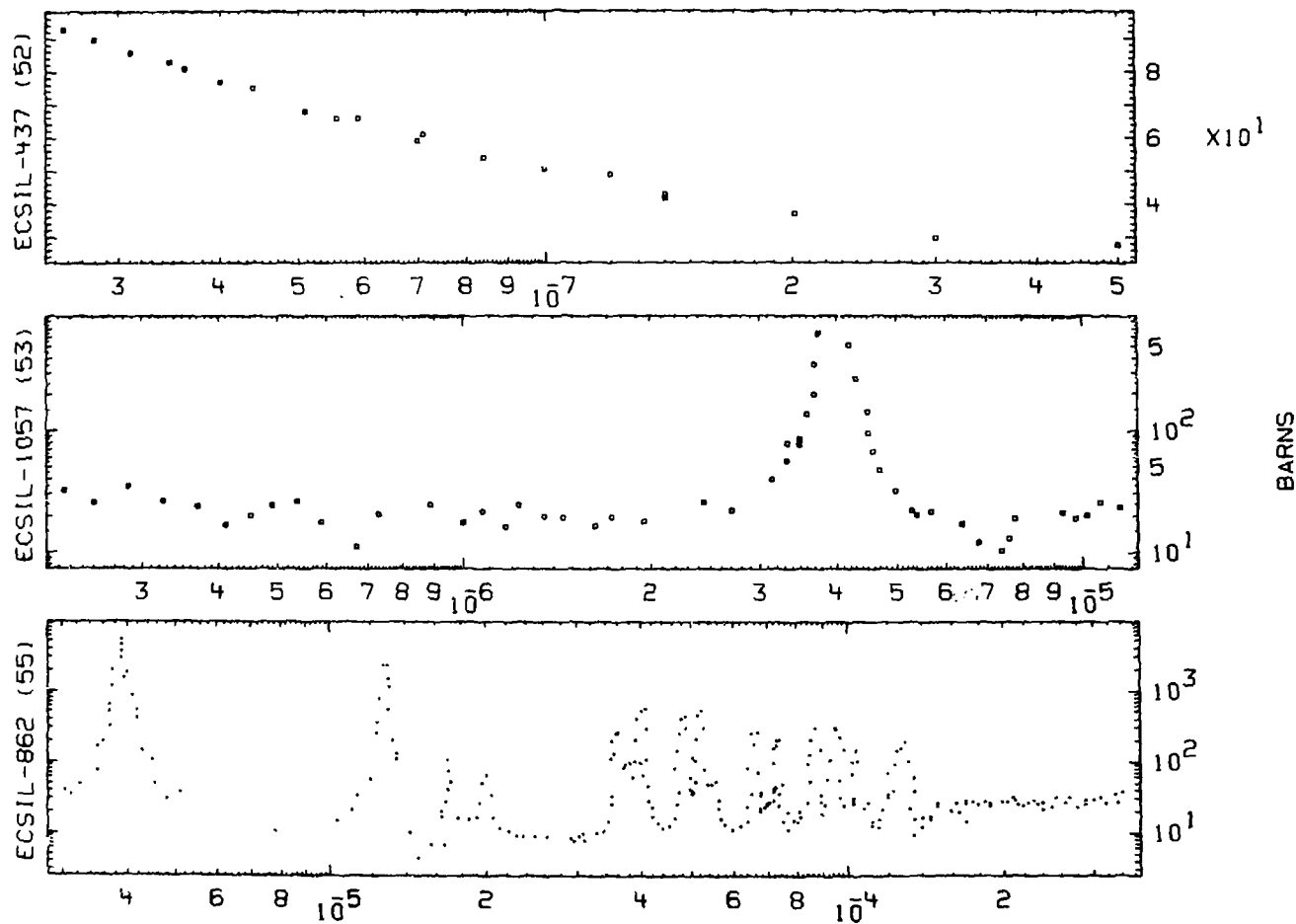
67-HO-165



03/01/74

TOTAL
CROSS SECTION

67-HO-165



8-57

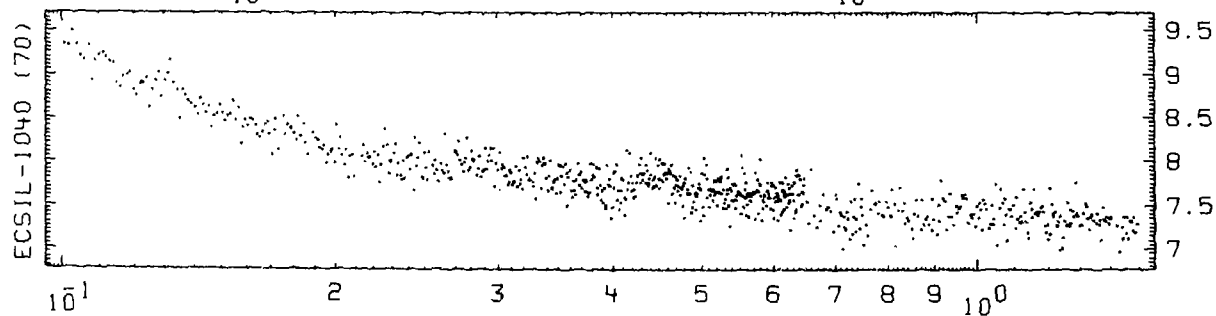
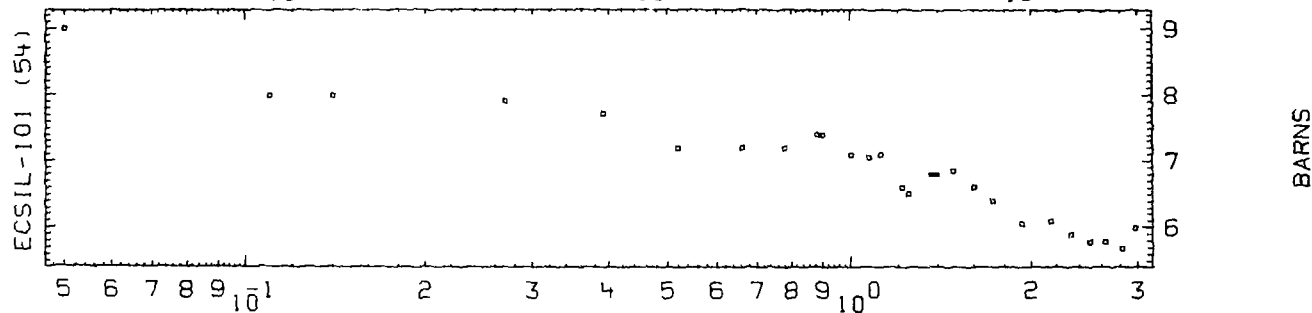
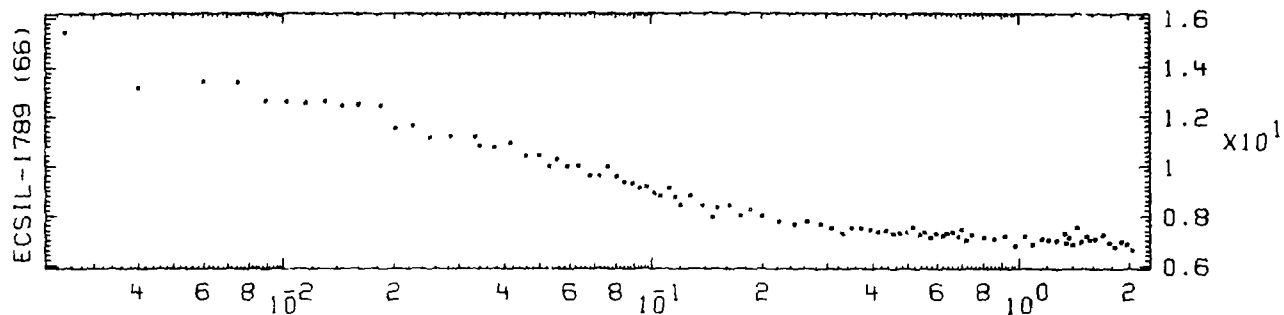
MEV

67-HO-165 -2

03/01/74

TOTAL
CROSS SECTION

67-HO-165



8-58

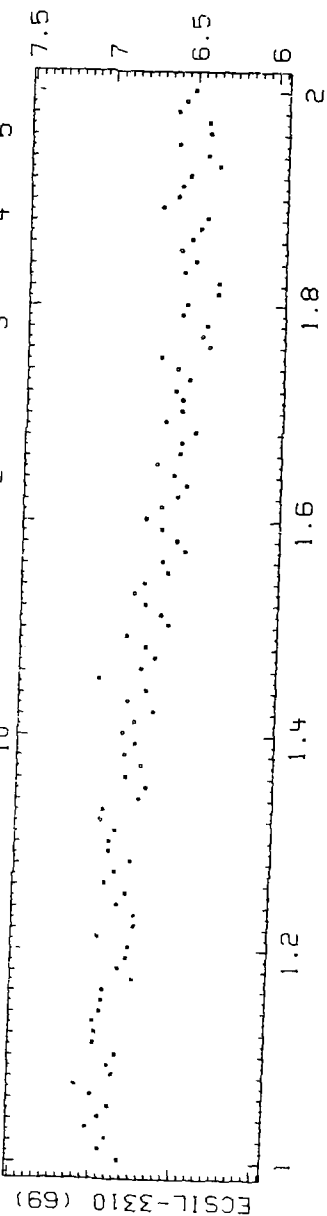
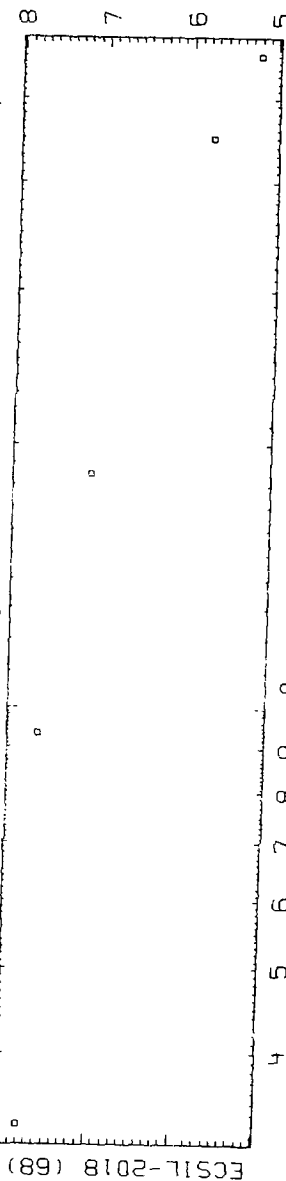
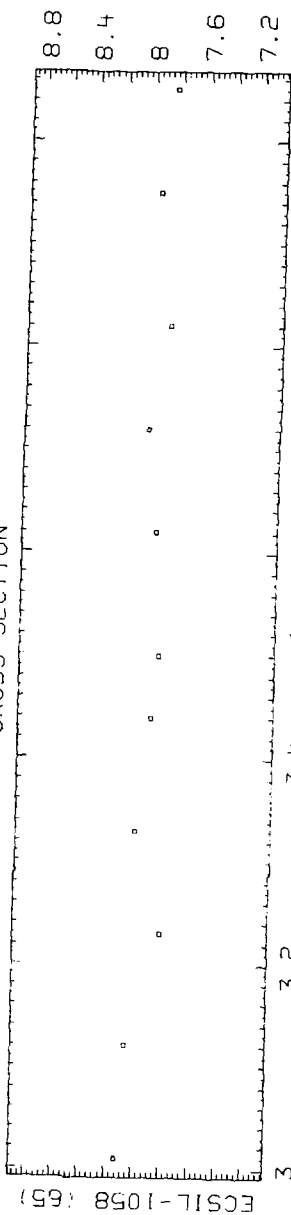
MEV

67-HO-165 -3

03/01/74

TOTAL CROSS SECTION

67-HO-165



BARN

8-59

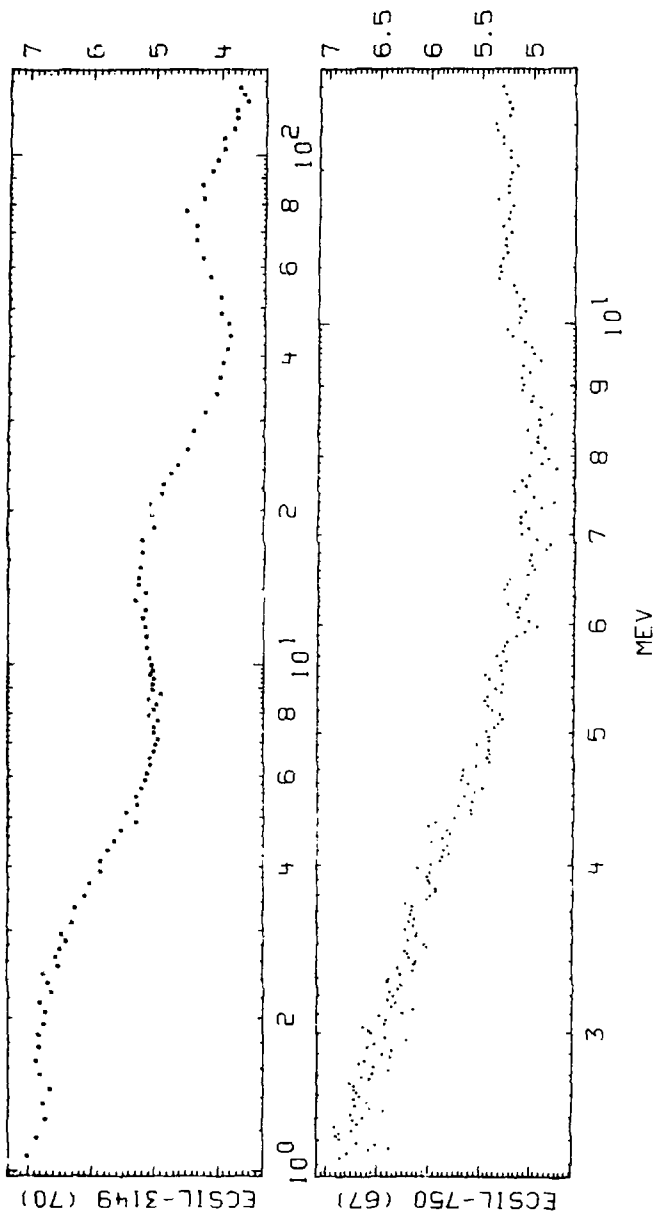
MEV

67-HO-165 -4

03/01/74

TOTAL
CROSS SECTION

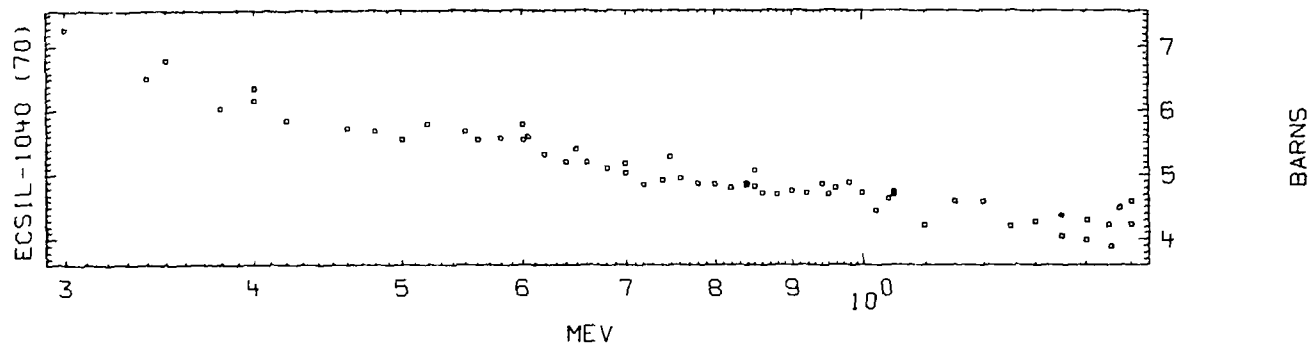
67-HO-165



03/01/74

ELASTIC
CROSS SECTION

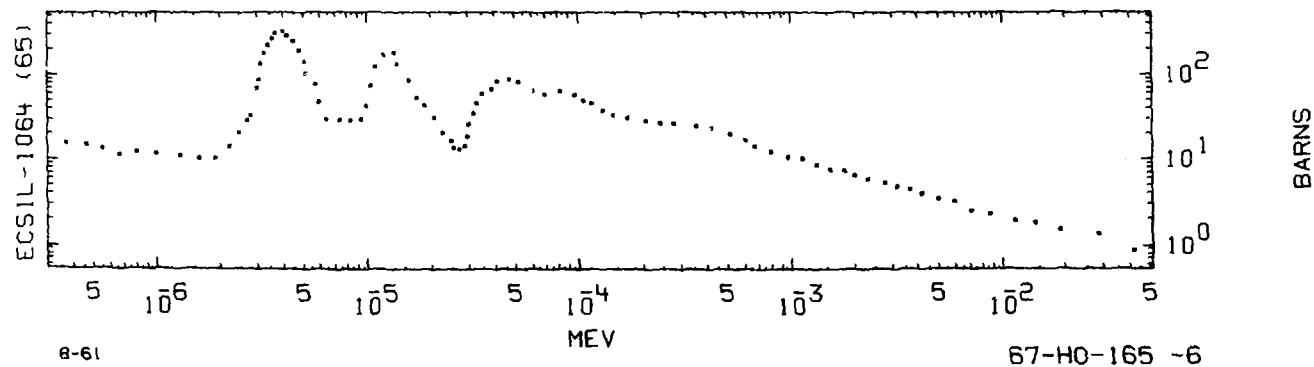
67-HO-165



03/01/74

N, GAMMA
CROSS SECTION

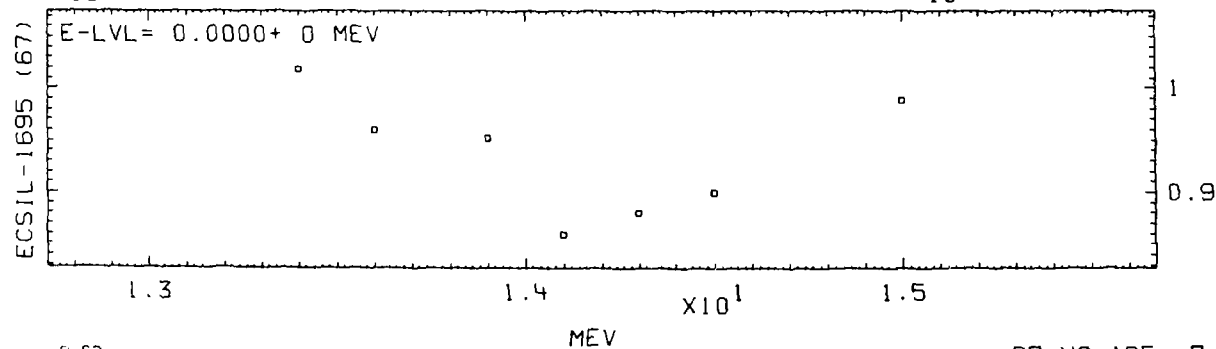
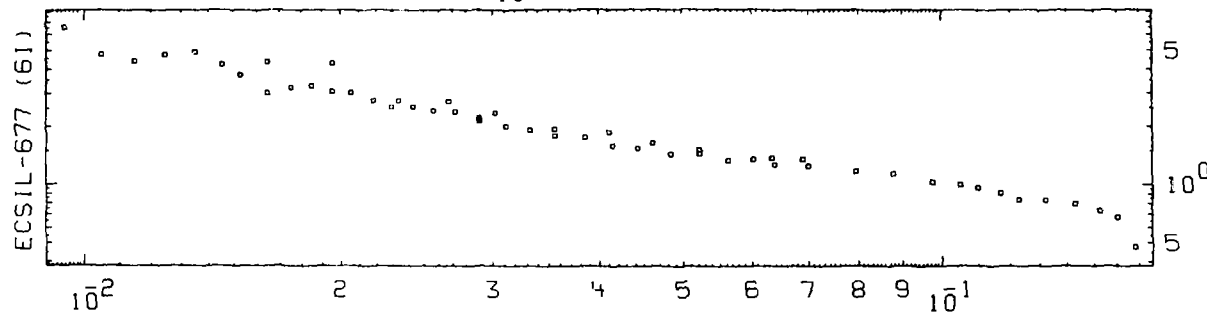
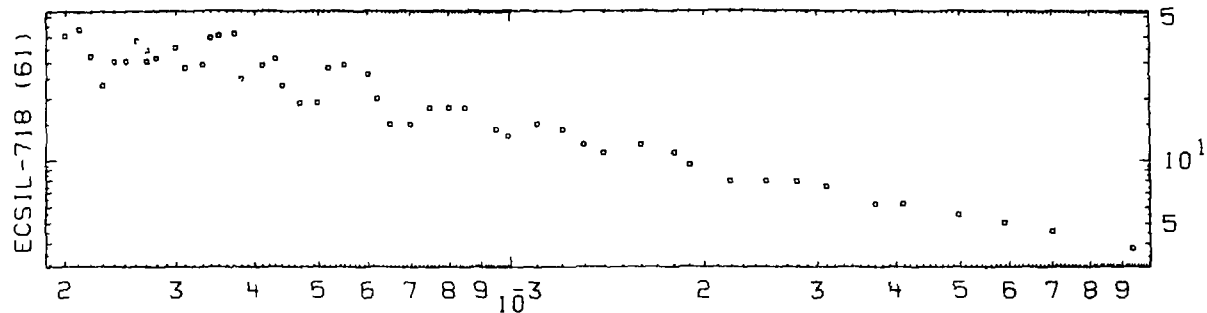
67-HO-165



03/01/74

N, GAMMA
CROSS SECTION

67-HO-165



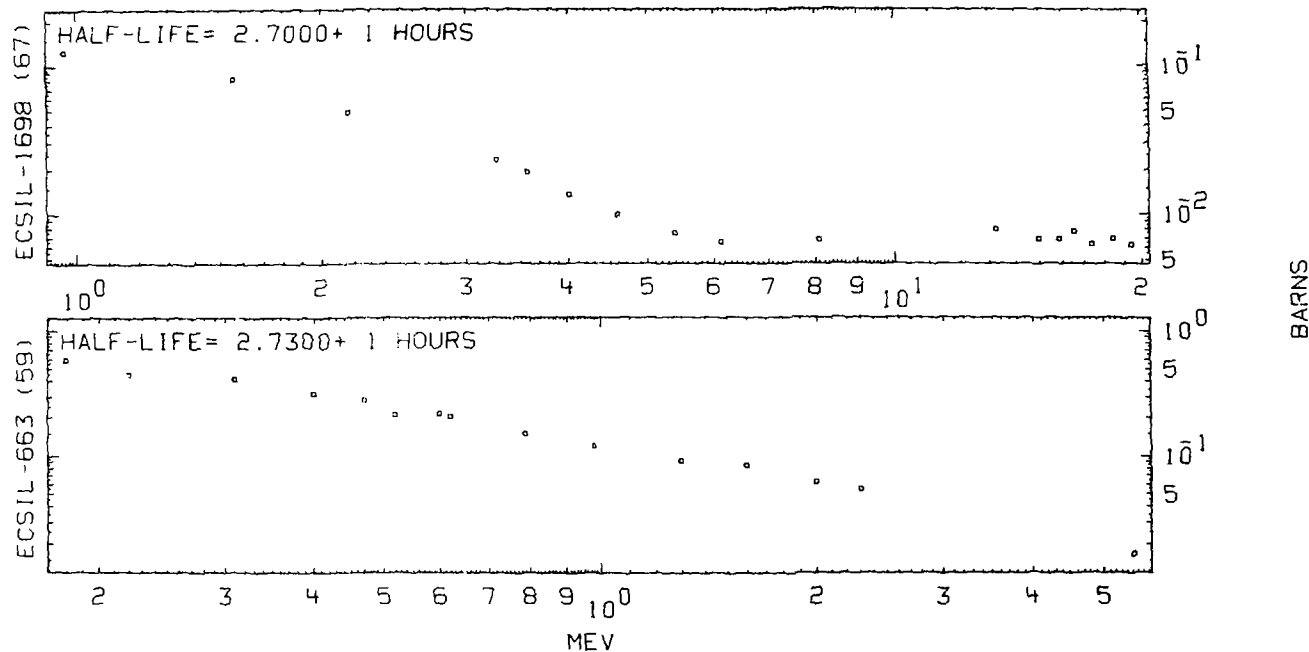
E-62

67-HO-165 -7

03/01/74

N, GAMMA
CROSS SECTION

67-HO-165



03/01/74

TOTAL

67-HO-165

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 1169	8.0500 ± 0		4.9100 ± 0	1.2000 ± 1	66 1169	1.5000 ± 1		5.2100 ± 0	9.0000 ± 2
66 1170	1.4000 ± 1		5.2600 ± 0	6.0000 ± 2					

03/01/74

N, GAMMA
CROSS SECTION

67-HO-165

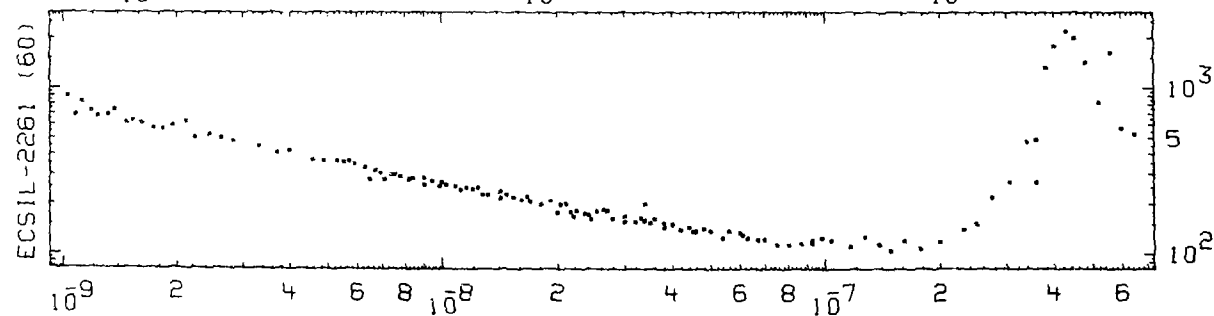
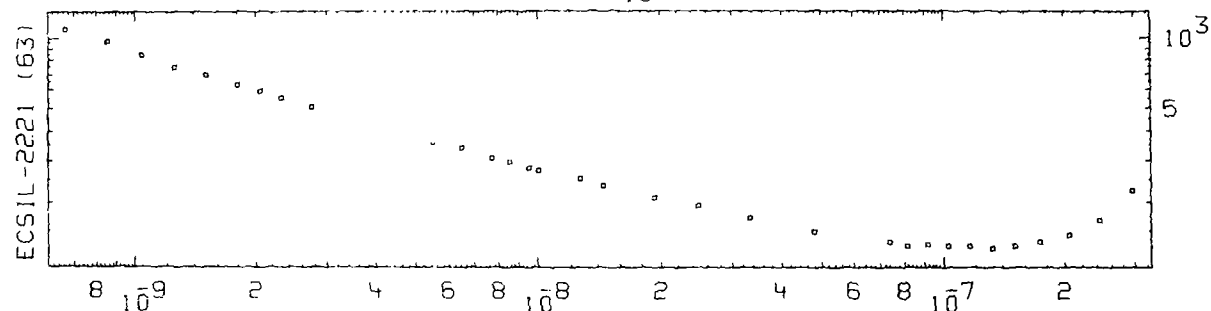
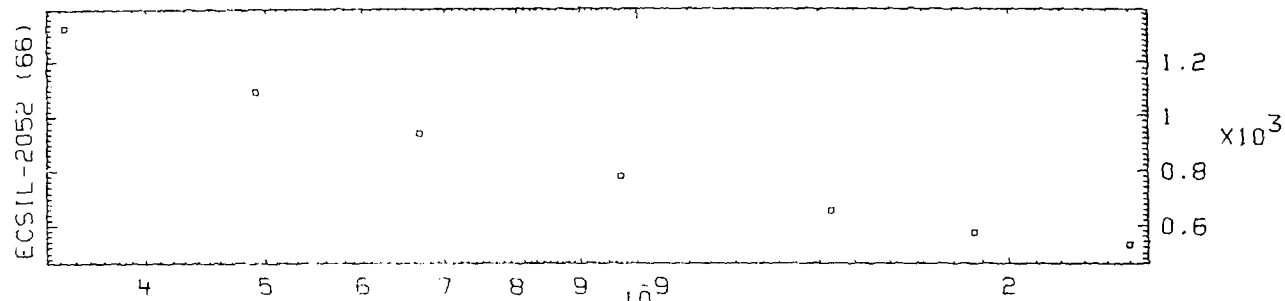
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63	1 3.0000- 2	8.0010- 3	1.7200+ 0	1.5000- 1
63	1 6.5000- 2	2.1000- 2	1.0700+ 0	9.6010- 2
71	3194 1.4000+ 1		1.0180- 3	2.5450- 4
57	521 1.4500+ 1		9.5010- 3	

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE HOURS
62	2972 2.5300- 8		6.4000+ 1	6.0000+ 0	2.7000+ 1
67	1991 3.0000+ 0	2.0000- 1	5.0000- 2	1.1000- 2	2.7000+ 1
67	1695 1.4700+ 1		8.8000- 3	6.0000- 4	2.7200+ 1
65	867 2.4000- 2		9.9000- 1	7.0000- 2	2.7300+ 1
47	888 2.5300- 8		5.9600+ 1	1.1920+ 1	3.0000+ 1

03/01/74

TOTAL
CROSS SECTION

68-ER-NAT



8-65

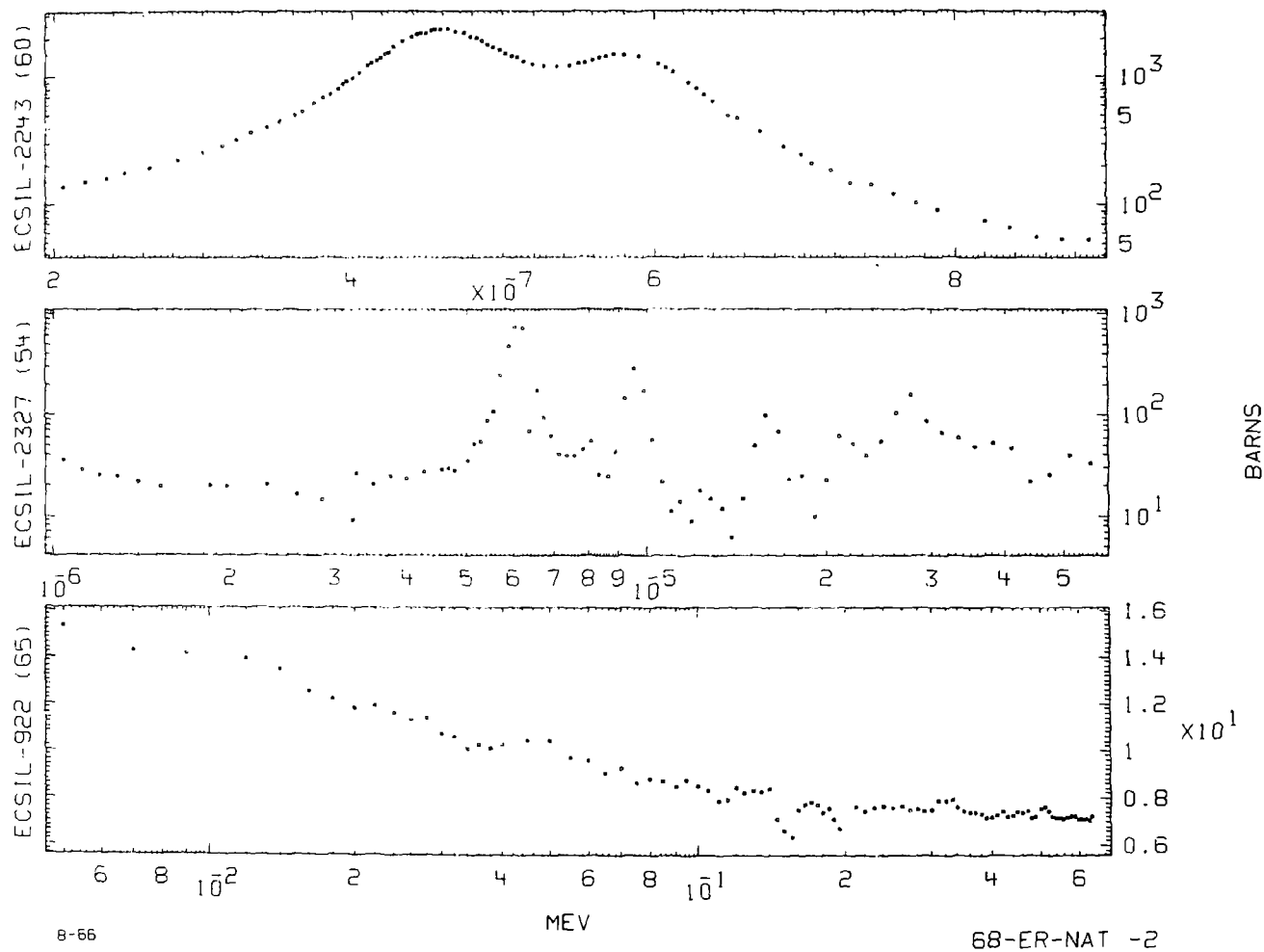
MEV

68-ER-NAT -1

03/01/74

TOTAL
CROSS SECTION

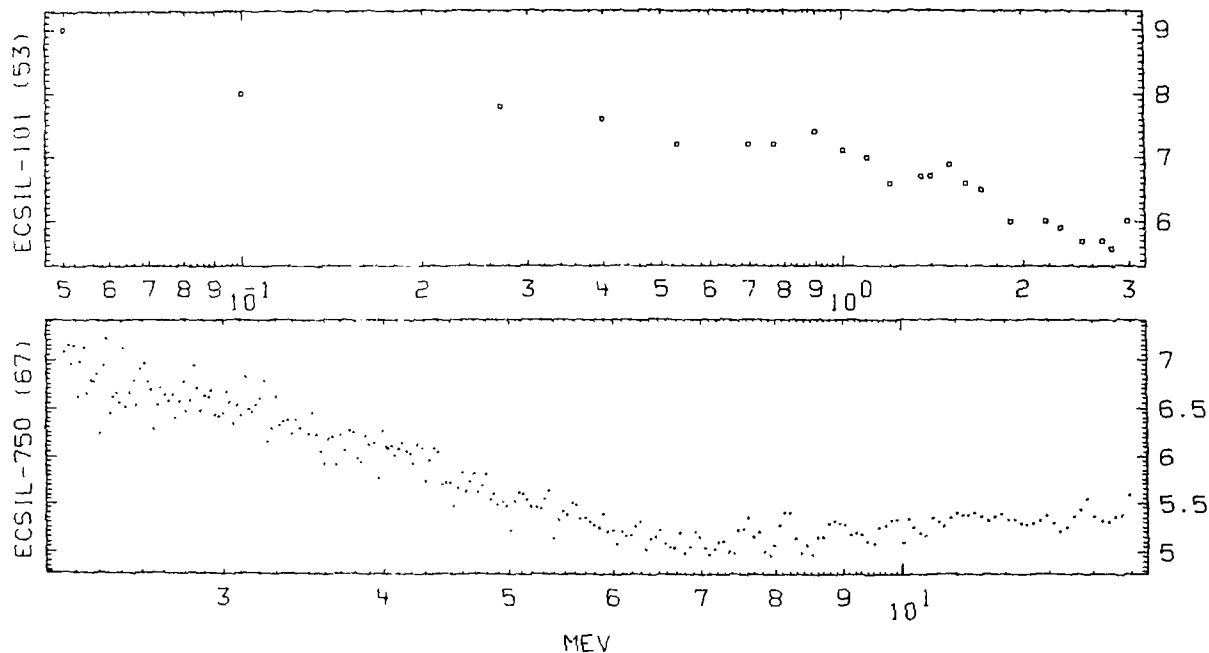
68-ER-NAT



03/01/74

TOTAL CROSS SECTION

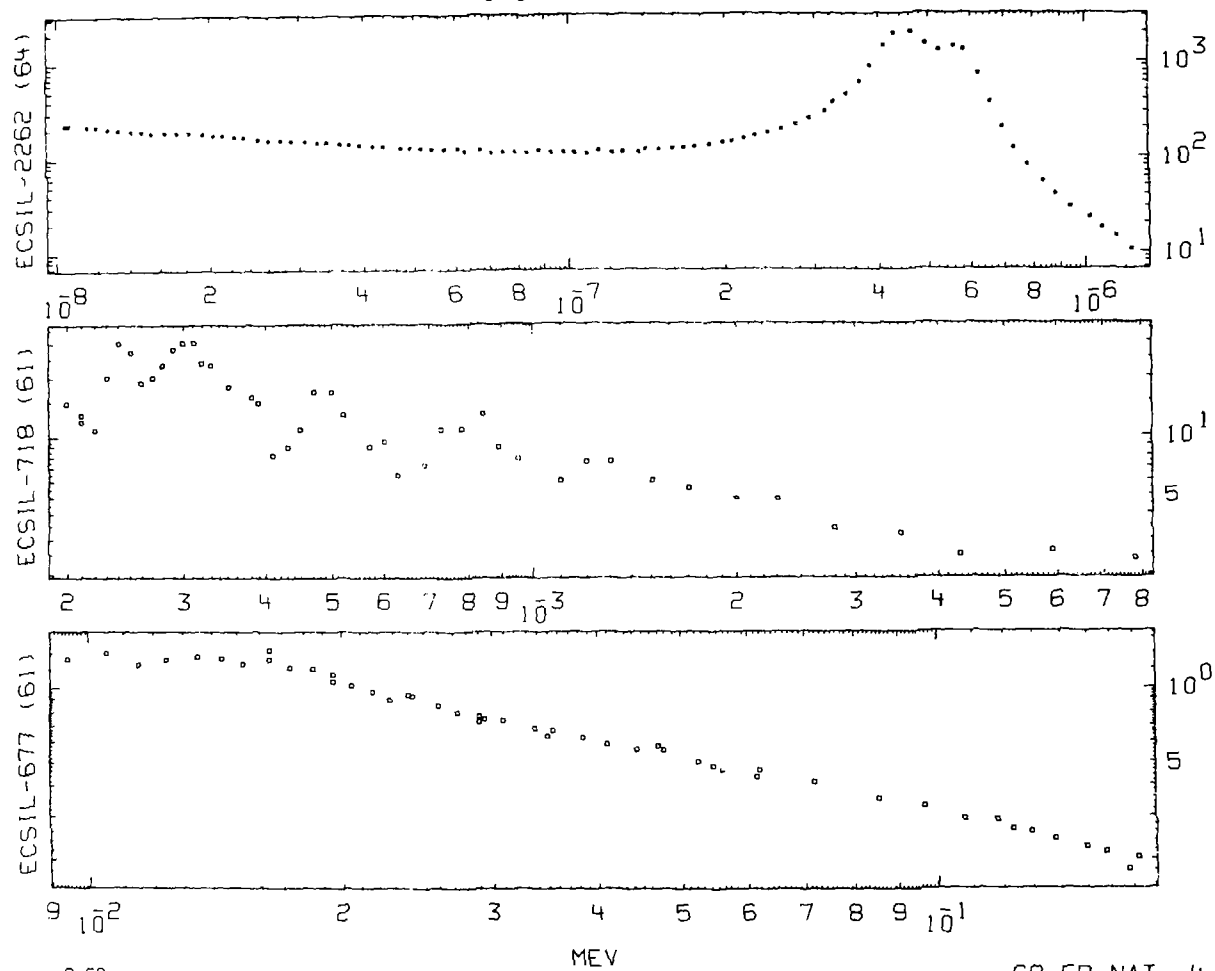
68-ER-NAT



03/01/74

N, GAMMA
CROSS SECTION

68-ER-NAT



8-68

68-ER-NAT -4

03/01/74

TOTAL
CROSS SECTION

68-ER-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 2221	2.5300- 8		1.9200+ 2	6.0000+ 0
52 437	2.5300- 8		1.7200+ 2	
58 324	1.3140+ 1	5.0000- 2	5.3710+ 0	9.0010- 2
58 324	1.4100+ 1	4.0000- 2	5.3710+ 0	8.0010- 2
58 324	1.5600+ 1	1.3000- 1	5.4100+ 0	1.0000- 1

03/01/74

ELASTIC

68-ER-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 3316	2.5300- 8		1.1000+ 1	8.0000- 1

03/01/74

N, GAMMA

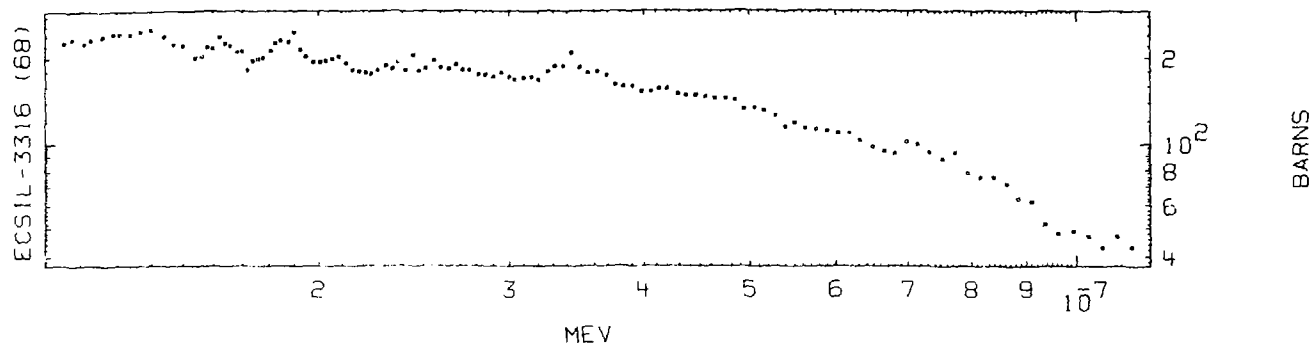
68-ER-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63 1	3.0000- 2	8.0010- 3	9.6010+ 0	8.6010- 1
63 1	6.5000- 2	2.1000- 2	5.4010+ 0	4.9000- 1

03/01/74

TOTAL
CROSS SECTION

68-ER-162



03/01/74

TOTAL

68-ER-162

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65 2430	2.5300- 8		3.1500+ 2	
66 2974	2.5300- 8		2.0000+ 2	2.5000+ 1

03/01/74

ELASTIC

68-ER-162

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 3316	2.5300- 8		3.8000+ 0	2.0000+ 0

03/01/74

N, GAMMA

68-ER-162

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 3316	2.5300- 8		1.8000+ 2	6.0000+ 1

03/01/74

TOTAL

68-ER-164

CROSS SECTION

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
67 2263	2.5300- 8		5.0000+ 1	8.0000+ 0

03/01/74

ELASTIC

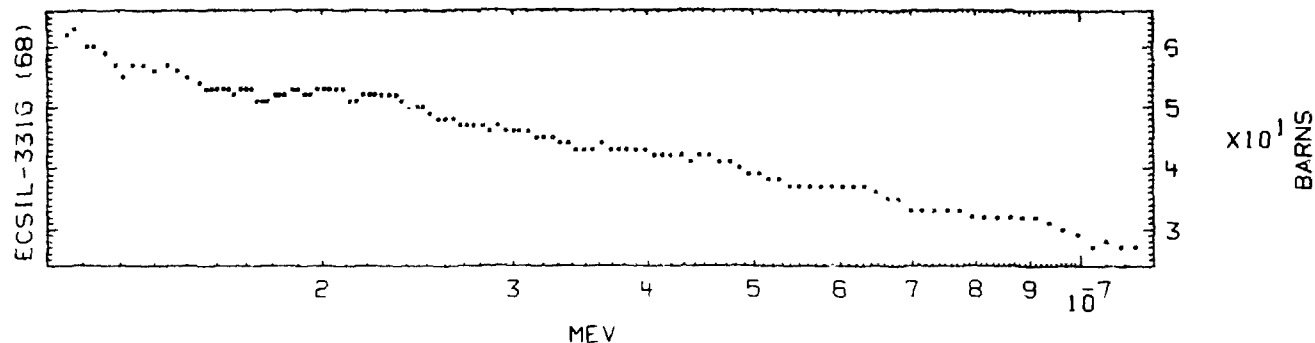
68-ER-164

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 3316	2.5300- 8		1.2700+ 1	7.0000- 1

03/01/74

TOTAL
CROSS SECTION

68-ER-166



03/01/74

TOTAL

68-ER-166

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
65 2430	2.5300- 8		9.4000+ 1	5.0000+ 0

03/01/74

ELASTIC

68-ER-166

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
68 3316	2.5300- 8		1.9100+ 1	1.0000+ 0

03/01/74

N, GAMMA

68-ER-166

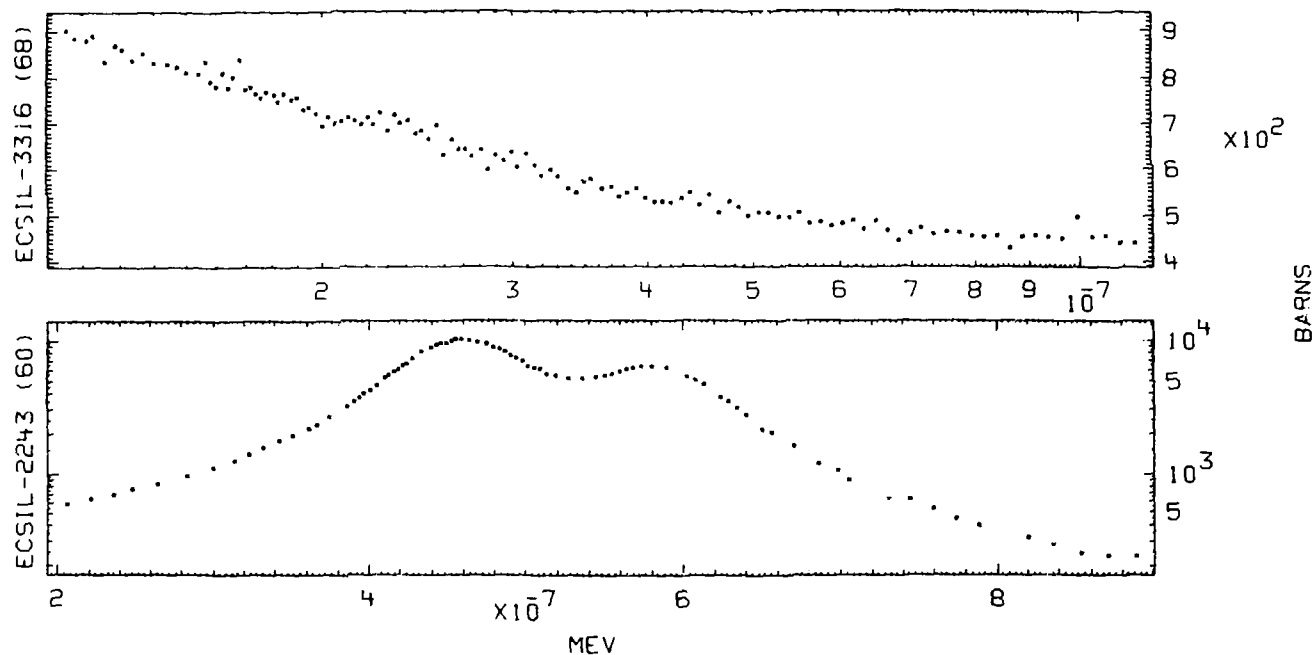
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
68 3316	2.5300- 8		3.0000+ 1	3.0000+ 0

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN	HALF-LIFE SECONDS
64 2645	2.5300- 8		3.3000+ 0	7.0000- 1	2.2700+ 0

03/01/74

TOTAL
CROSS SECTION

68-ER-167



03/01/74

TOTAL

68-ER-167

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65 2430	2.5300- 8		6.7000+ 2	3.0000+ 1

03/01/74

ELASTIC
CROSS SECTION

68-ER-167

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 3316	2.5300- 0		7.9000+ 0	8.0000- 1

03/01/74

N, GAMMA

68-ER-167

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
67 2355	2.5300- 8		6.9900+ 2	2.0000+ 1
68 3316	2.5300- 8		6.5800+ 2	3.0000+ 1

03/01/74

TOTAL
CROSS SECTION

68-ER-168

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65 2430	2.5300- 8		3.5000+ 1	1.0000+ 1
67 2263	2.5300- 8		3.3600+ 1	2.0000+ 0

03/01/74

ELASTIC

68-ER-168

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 3316	2.5300- 8		1.3100+ 1	7.0000- 1

03/01/74

N, GAMMA

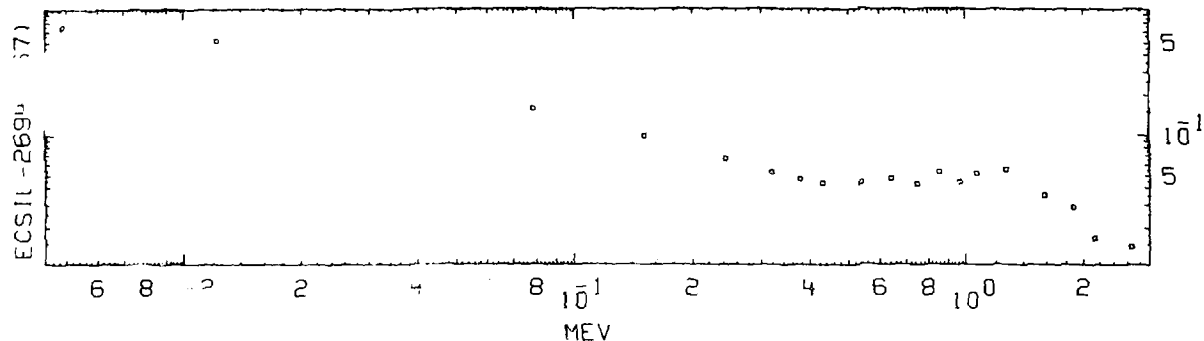
68-ER-168

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 3316	2.5300- 8		6.0000+ 0	1.0000+ 1

03/01/74

N, GAMMA
CROSS SECTION

68-ER-170



BARNs

03/01/74

TOTAL

68-ER-170

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65 2430	2.5300- 8		4.5000+ 1	

03/01/74

ELASTIC

68-ER-170

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 3316	2.5300- 8		1.5900+ 1	8.0000- 1

03/01/74

N, GAMMA

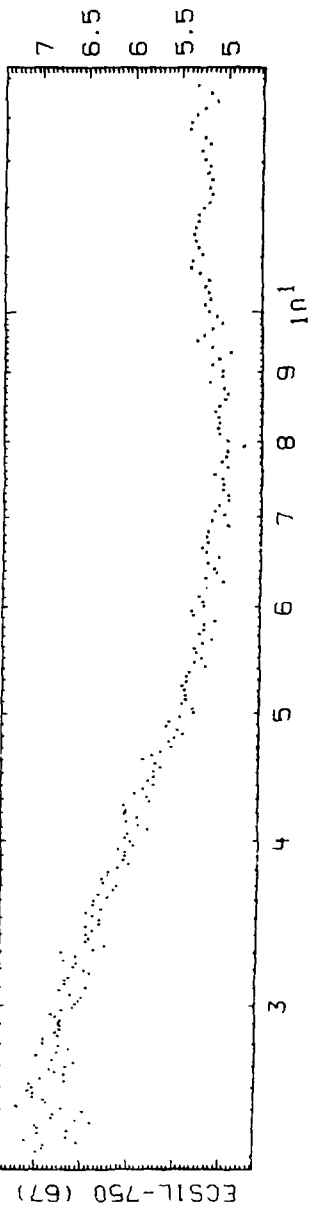
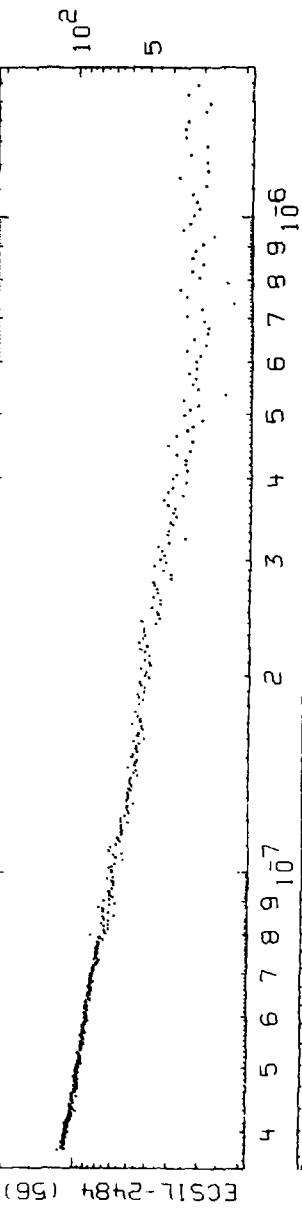
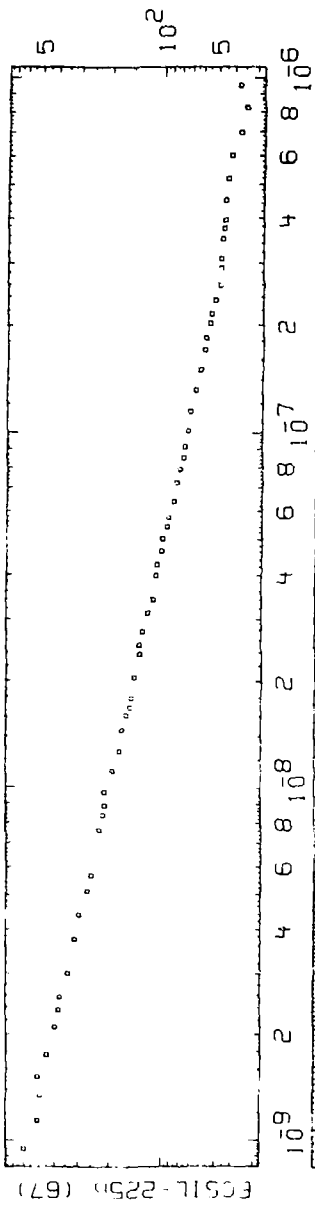
68-ER-170

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 3316	2.5300- 8		1.2000+ 1	5.0000+ 0
68 2856	2.4000- 2		2.5500- 1	3.0000- 2
57 305	2.4000- 2	5.0000- 3	2.9800- 1	3.0000- 2
67 1991	3.0000+ 0	2.0000- 1	1.5800	2 3.0000- 3

03/01/74

69-TM-169

TOTAL
CROSS SECTION

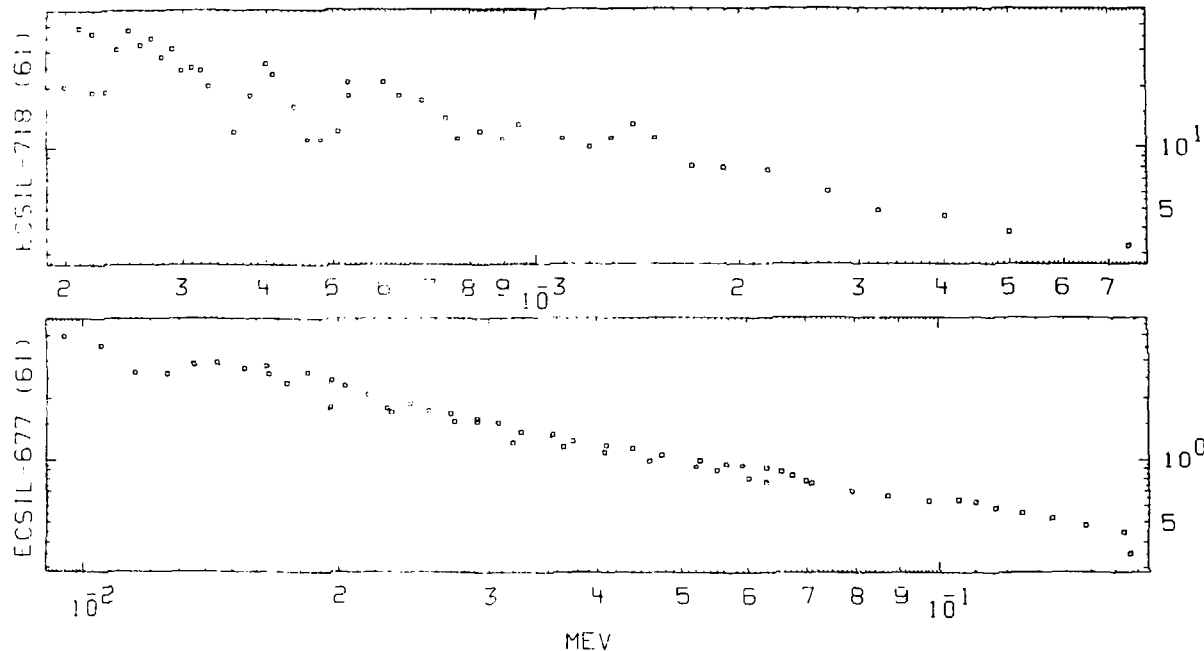


BARNs

03/01/74

N, GAMMA
CROSS SECTION

69-TM-169



03/01/74

N, GAMMA

69-TM-169

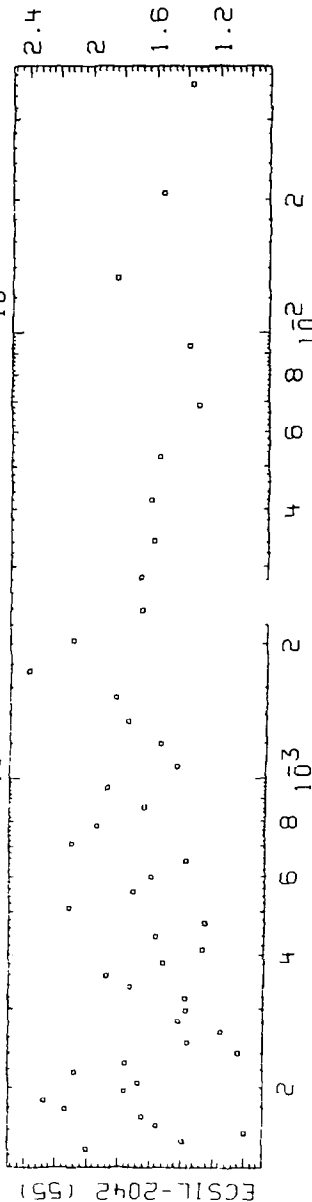
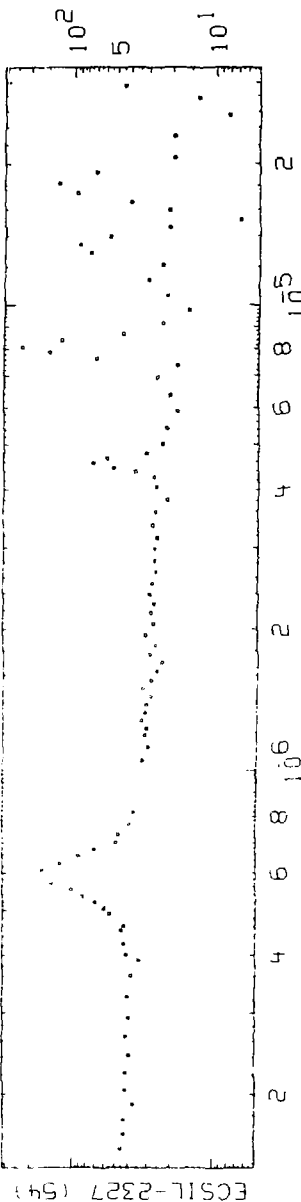
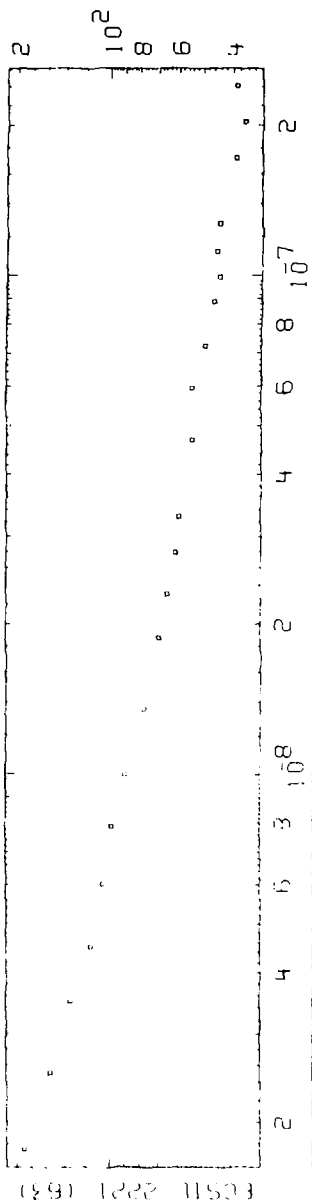
REFERENCE	ENERGY MEV	DELTA MEV	X SEC BARNs	DELTA BARNs
47 888	2.5300- 8		1.0600+ 2	2.1200+ 1
63 1	3.0000- 2	0.0010- 3	1.3100+ 0	1.2000- 1
63 1	6.5000- 2	2.1000- 2	7.0010- 1	6.3010- 2

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TOTAL

CROSS SECTION

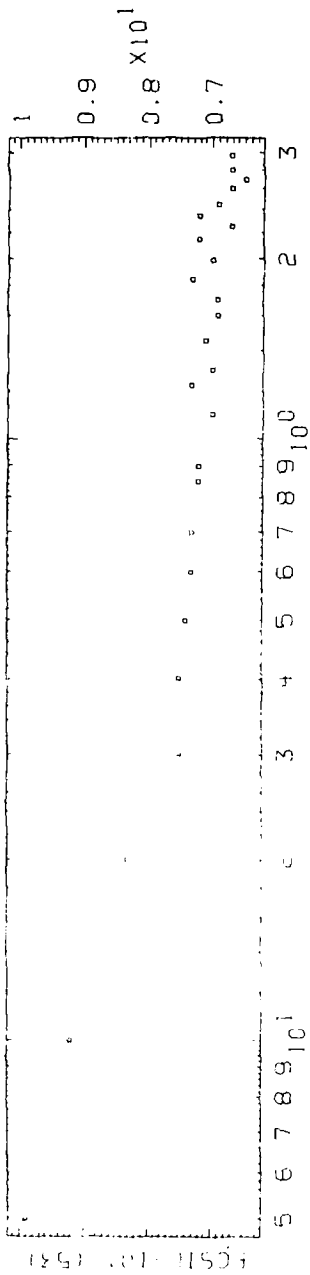
70-YB-NAT



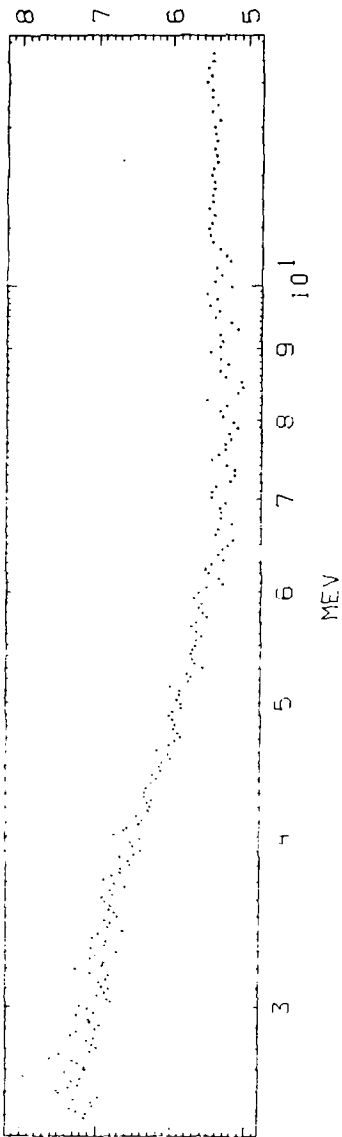
03/01 74

TOTAL
CROSS SECTION

70-YB-NAT



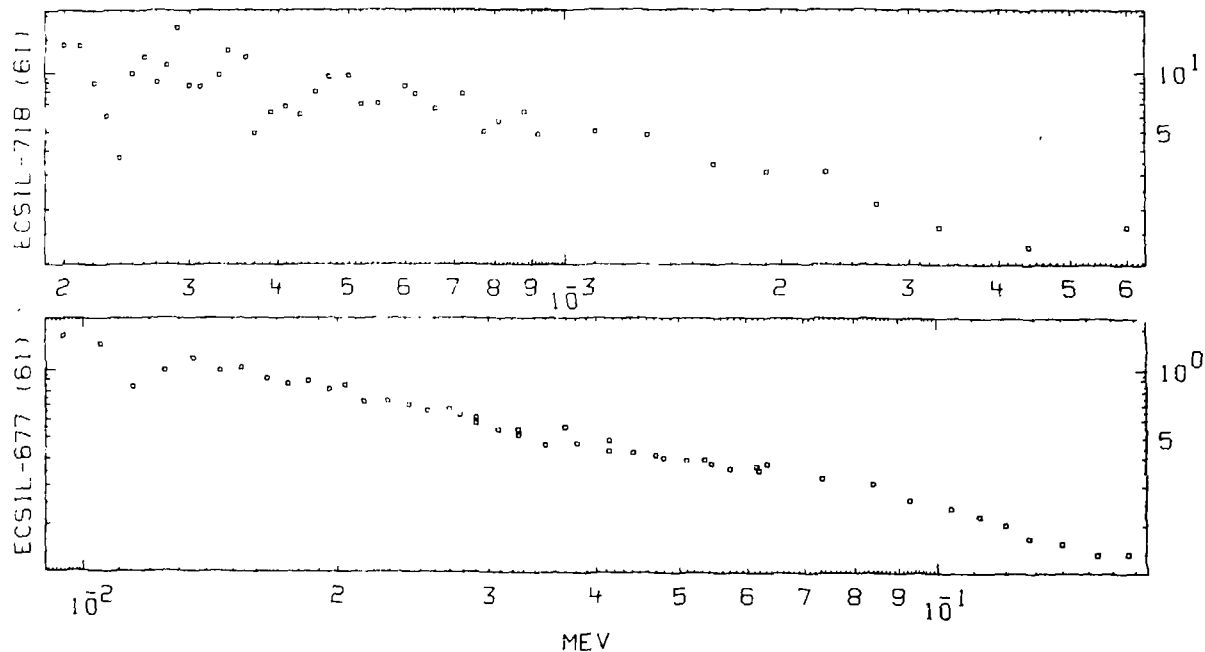
EC511-750 (67)



03/01/74

N, GAMMA
CROSS SECTION

70-YB-NAT



03/01/74

TOTAL

70-YB-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
68 2267	2.5300- 8		6.7500+ 1	2.0000+ 0	61 2845	7.3500- 8		5.0700+ 1	5.0000- 1
66 2221	2.5300- 6		6.4000+ 1	2.0000+ 0					

03/01/74

N, GAMMA
CROSS SECTION

70-YB-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63	1 3.0000- 2 8.0010-	3 5.7510-	1 5.2010-	2
63	1 6.5000- 2 2.1000-	2 3.9000-	1 3.5000-	2

03/01/74

TOTAL
CROSS SECTION

70-YB-170

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 2267	2.5300- 8		1.7000+ 1	1.0000+ 0

03/01/74

TOTAL
CROSS SECTION

70-YB-171

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 2267	2.5300- 8		5.7000+ 1	3.0000+ 0

03/01/74

TOTAL
CROSS SECTION

70-YB-172

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 2267	2.5300- 8		1.0200+ 1	1.5000+ 0

03/01/74

TOTAL
CROSS SECTION

70-YB-173

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 2267	2.5300- 8		2.8000+ 1	2.0000+ 0

03/01/74

TOTAL
CROSS SECTION

70-YB-174

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 2267	2.5300- 8		1.4200+ 2	5.0000+ 0

03/01/74

N.GAMMA

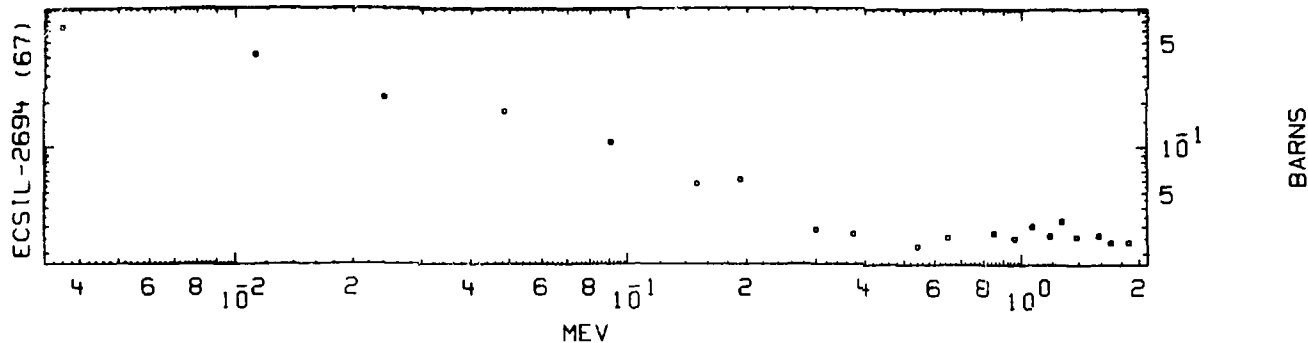
70-YB-174

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE DAYS
63 2581	2.5300- 8		5.5000+ 1	1.0000+ 1	4.2000+ 0

03/01/74

N, GAMMA
CROSS SECTION

70-YB-176



03/01/74

TOTAL

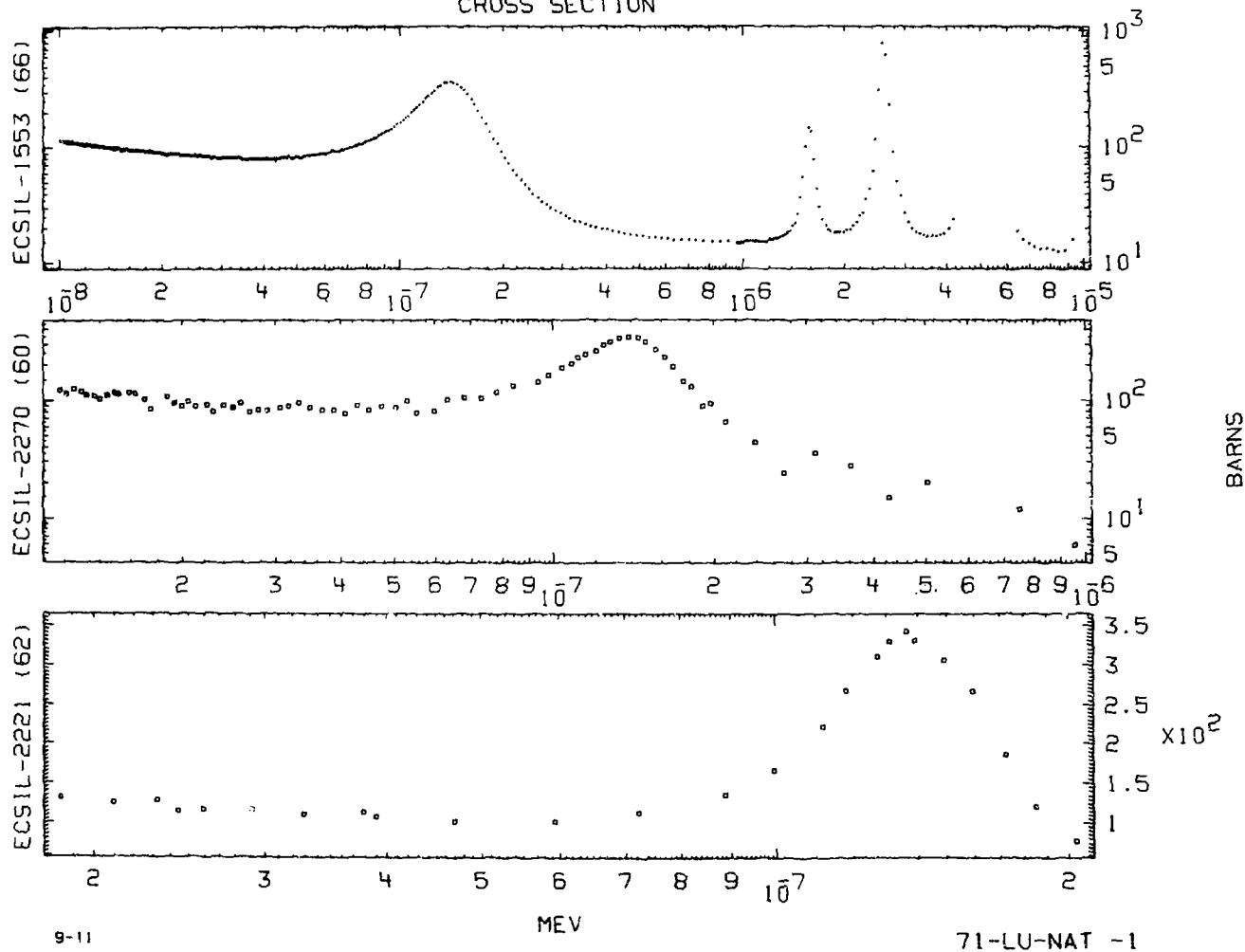
70-YB-176

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 2287	2.5300- 8		1.4900+ 1	1.0000+ 0

03/01/74

TOTAL
CROSS SECTION

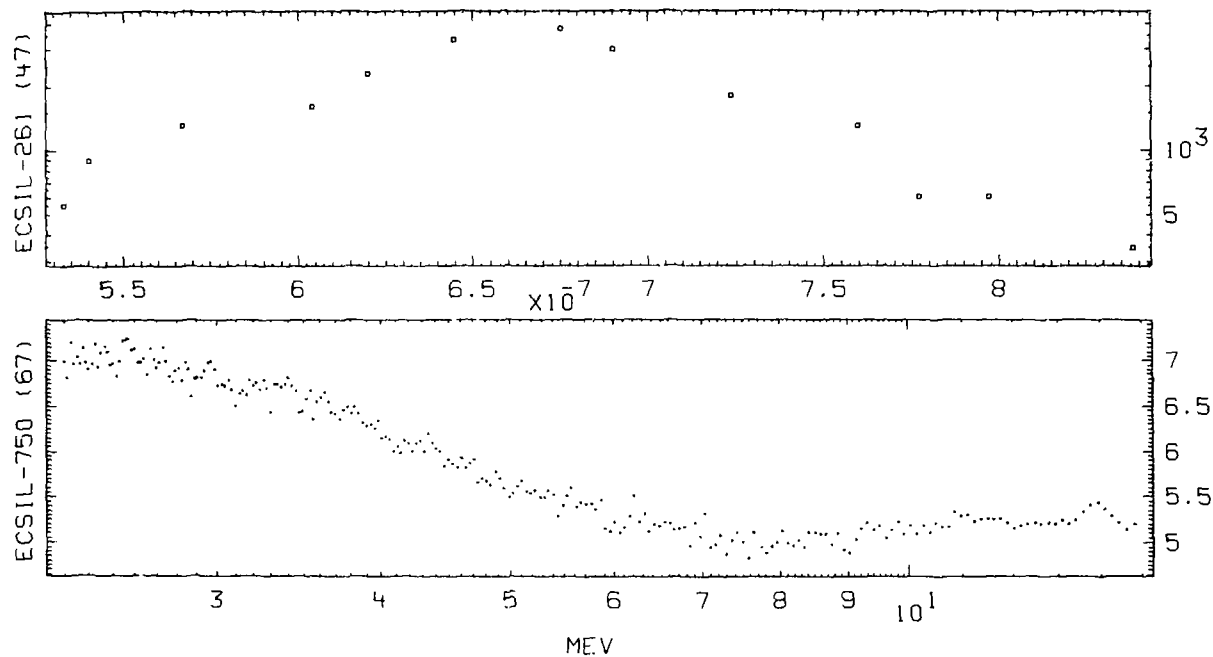
71-LU-NAT



03/01/74

TOTAL
CROSS SECTION

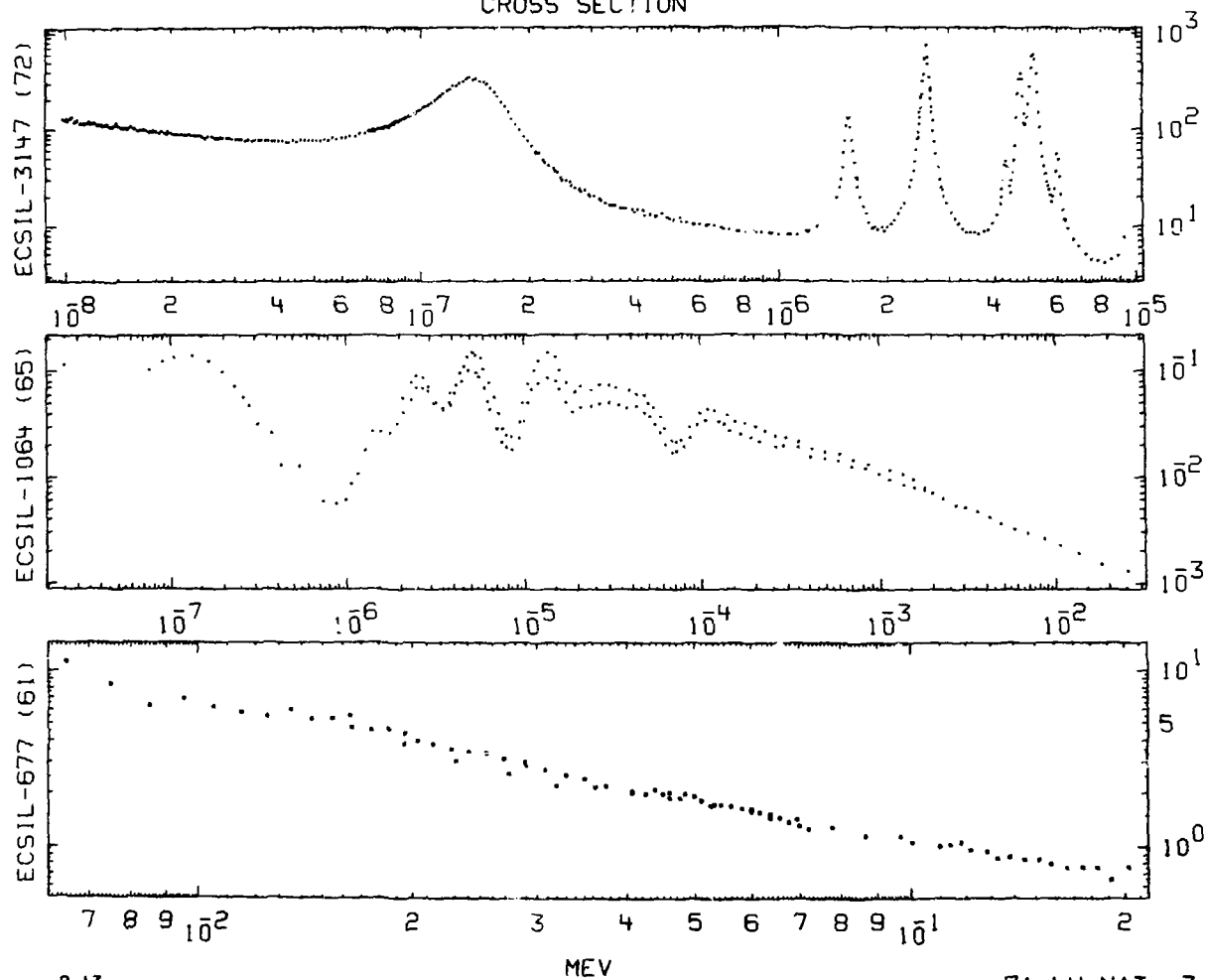
71-LU-NAT



03/01/74

N, GAMMA
CROSS SECTION

71-LU-NAT



03/01/74

TOTAL
CROSS SECTION

71-LU-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63 2221	2.5300- 8		1.1630+ 2	1.0000+ 0

03/01/74

N, GAMMA

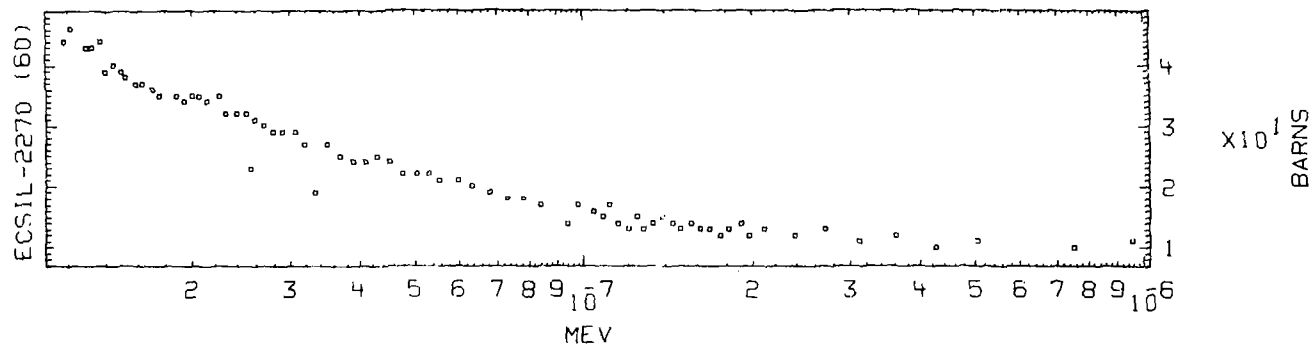
71-LU-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63 1	3.0000- 2	8.0010- 3	2.5200+ 0	2.3000- 1
63 1	6.5000- 2	2.1000- 2	1.2000+ 0	1.1000- 1

03/01/74

TOTAL
CROSS SECTION

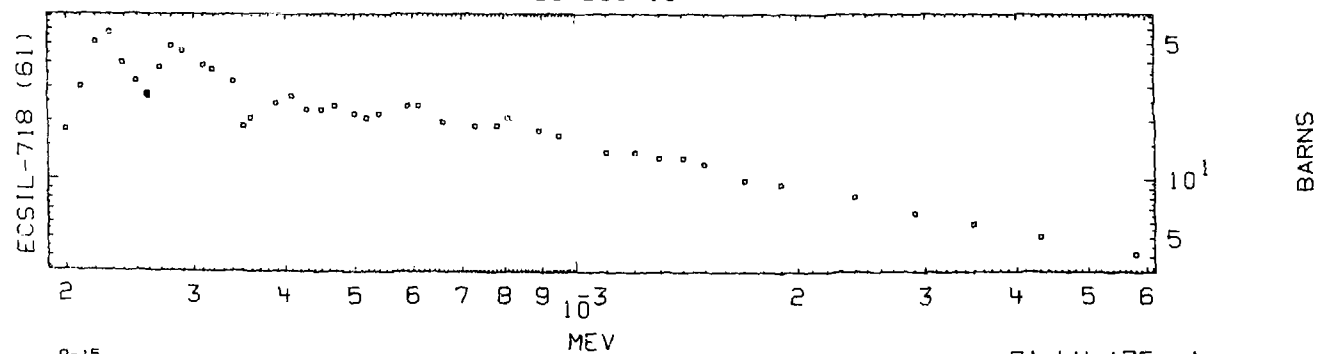
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03/01/74

N, GAMMA
CROSS SECTION

71-LU-175



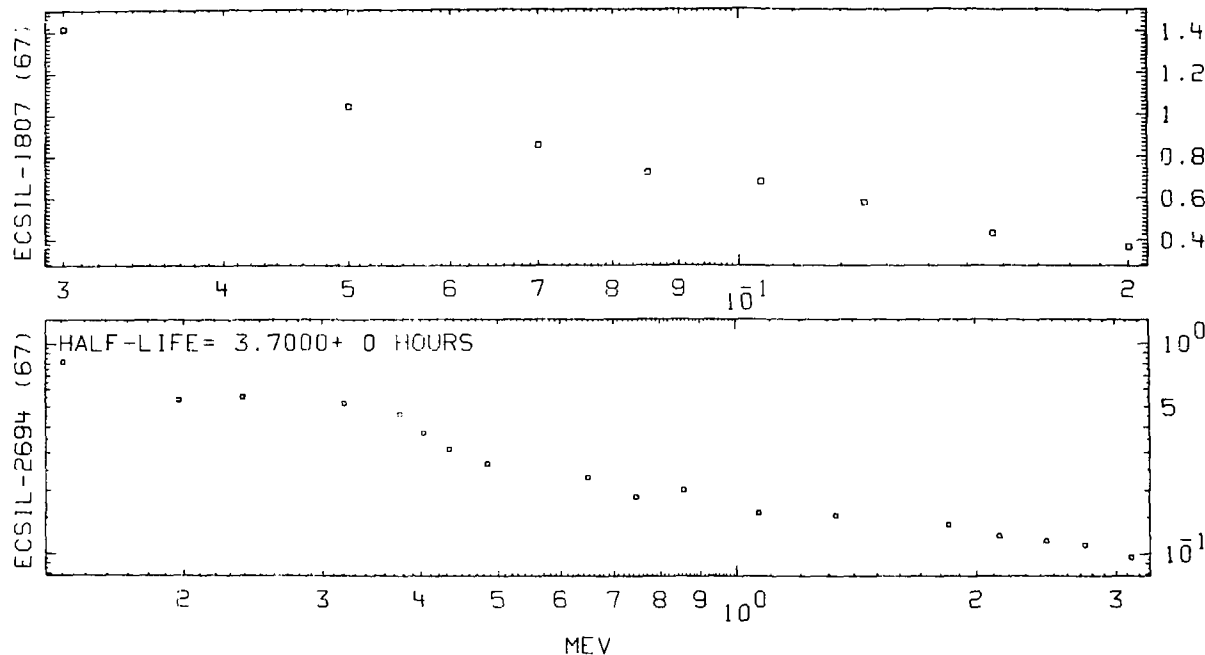
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71-LU-175 -1

03/01/74

N, GAMMA
CROSS SECTION

71-LU-175



03/01/74

N, GAMMA

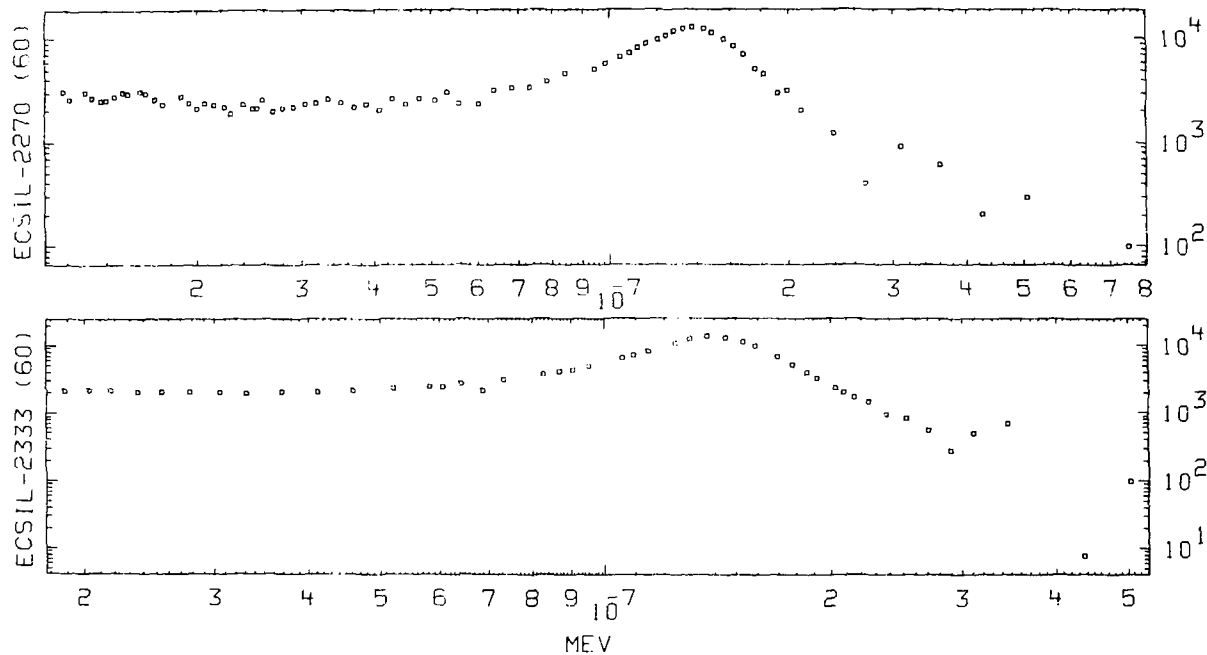
71-LU-175

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA HALF-LIFE BARN	DELTA HALF-LIFE HOURS
65 867	2.4000- 2		1.6700+ 0	1.2000- 1	3.7000+ 0
60 672	1.4800+ 1	8.0010- 1	2.0000- 3	1.0000- 3	3.7000+ 0

03/01/74

TOTAL
CROSS SECTION

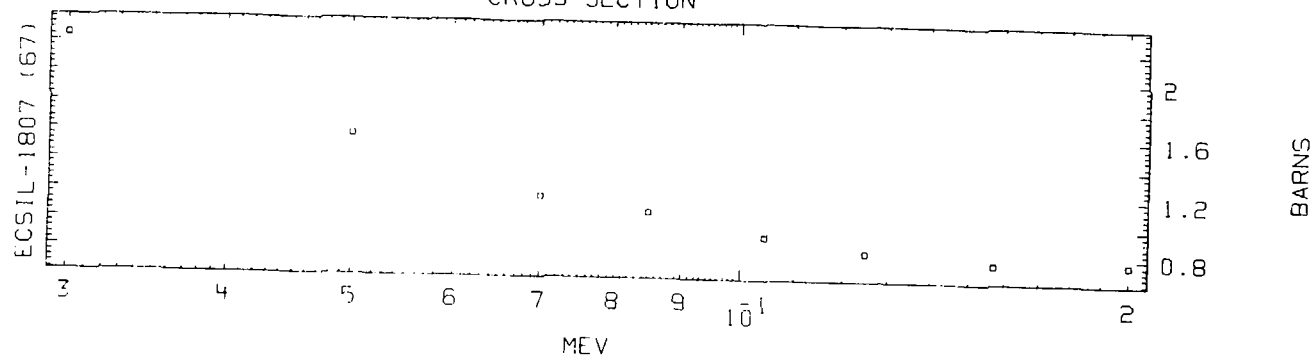
71-LU-176



03/01 74

N, GAMMA
CROSS SECTION

71-LU-176



03/01/74

N, GAMMA

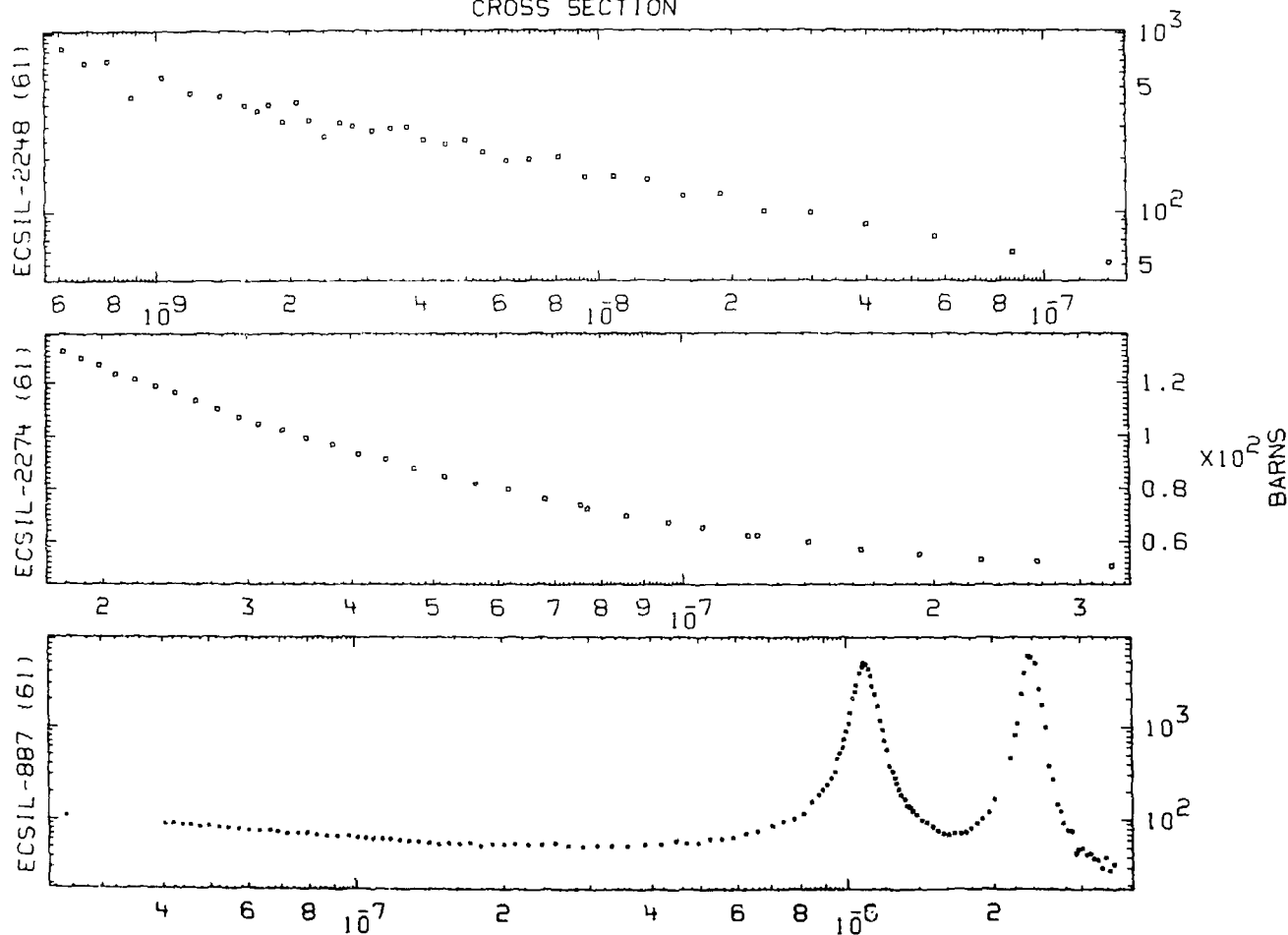
71-LU-176

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA HALF-LIFE BARNs * DAYS
47 888	2.5300- 8		3.6400+ 3	7.2800+ 2 6.6000+ 0
62 2634	2.5300- 8		1.0000+ 0	1.5500+ 2

03/01/74

TOTAL
CROSS SECTION

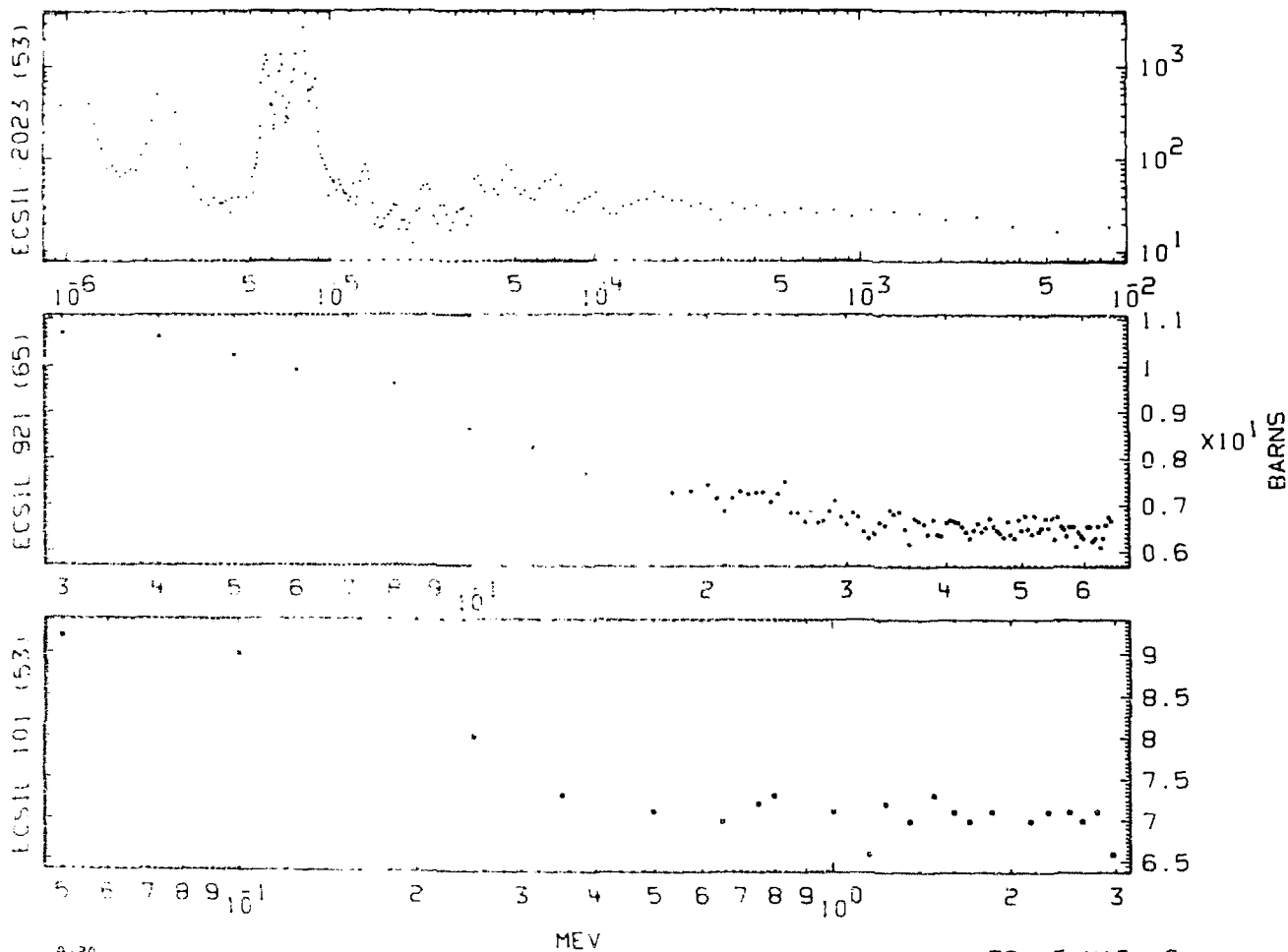
72-HF-NAT



03/01/74

TOTAL
CROSS SECTION

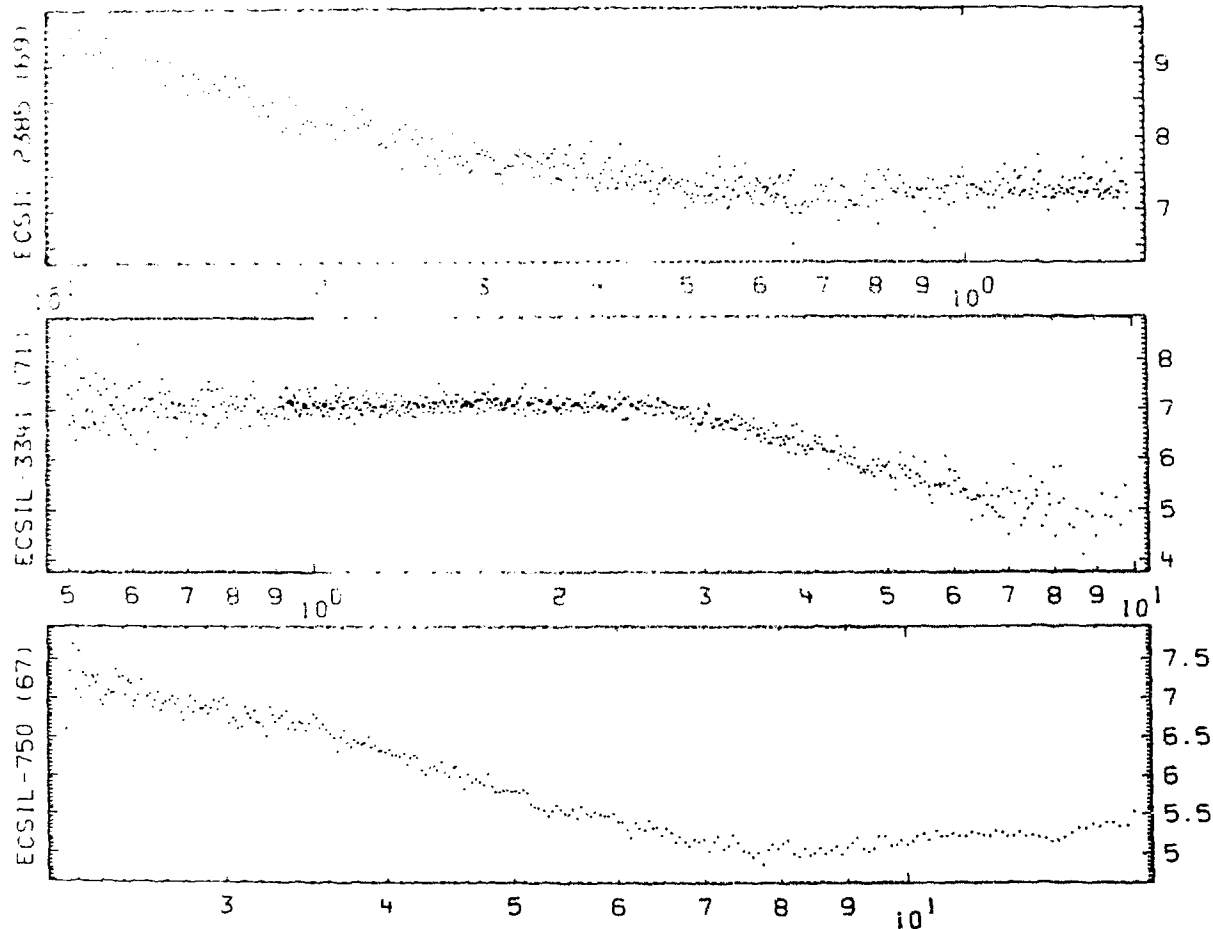
72-HF-NAT



03 01 74

TOTAL
CROSS SECTION

72-HF-NAT

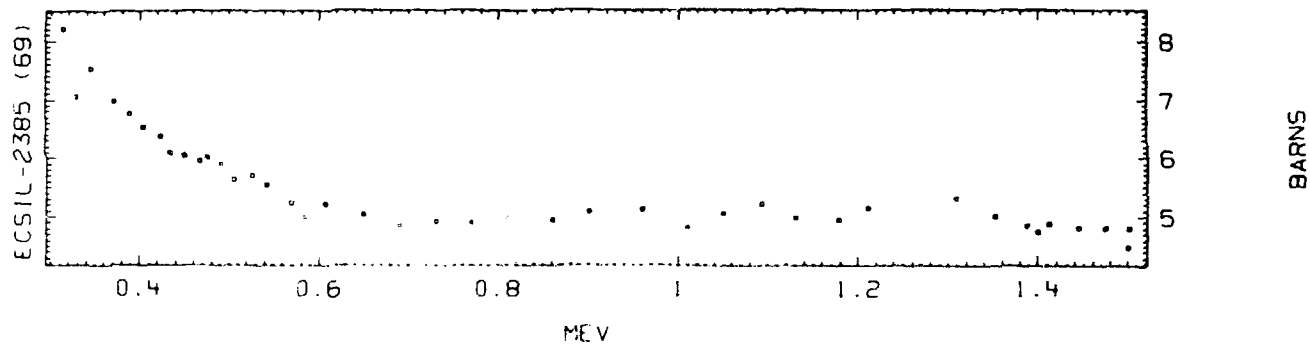


BARNs

03/01/74

ELASTIC
CROSS SECTION

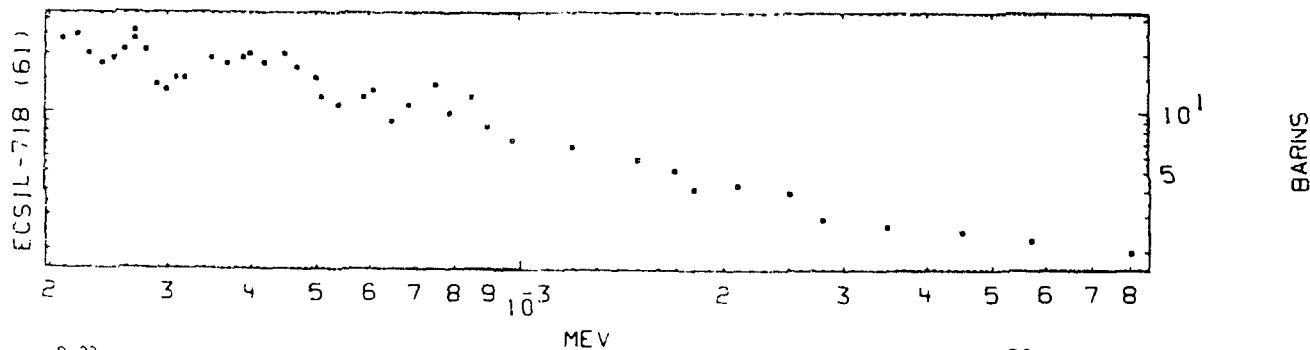
72-HF-NAT



03/01/74

N, GAMMA
CROSS SECTION

72-HF-NAT



9-22

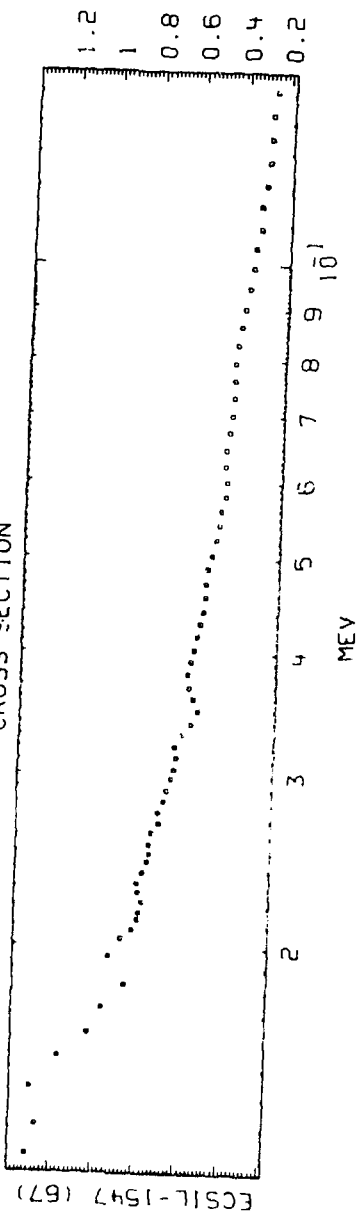
72-HF-NAT -4

03/01/74

N, GAMMA

CROSS SECTION

72-HF-NAT



03/01/74

TOTAL

72-HF-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
52	437 2.5300- 0		1.1500- 2	
50	247 2.3000- 3		1.4900- 1	
56	232 1.4000- 1		5.3810- 0 8.0010- 2	

03/01/74

ELASTIC

72-HF-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
54	103 1.0000- 0 8.0000- 2	5.1000- 0 7.6500- 1		

03/01/74

N, GAMMA

72-HF-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
63	1 3.0000- 2 8.0010- 3	5.1010- 1 4.6000- 2		
63	1 6.5000- 2 2.1000- 2	3.3000- 1 3.0000- 2		

9-23

72-HF-NAT -5

03/01/74

N, GAMMA
CROSS SECTION

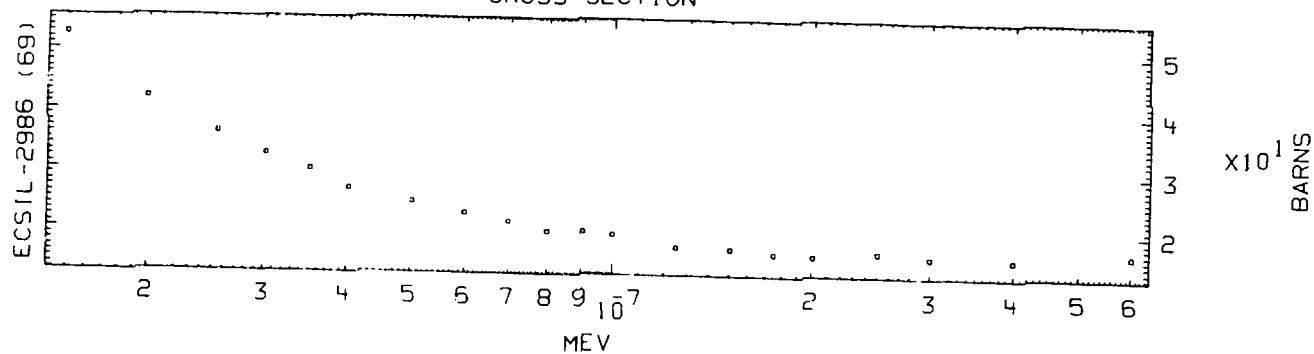
72-HF-174

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
61 2637	2.5300- 8		3.9000+ 2	5.5000+ 1

03/01/74

TOTAL
CROSS SECTION

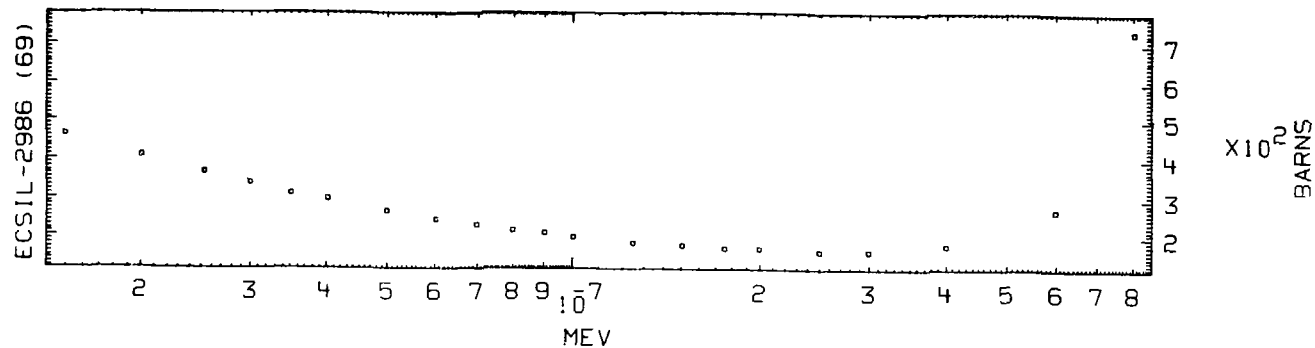
72-HF-176



03/01/74

TOTAL
CROSS SECTION

72-HF-177



03/01/74

N, GAMMA

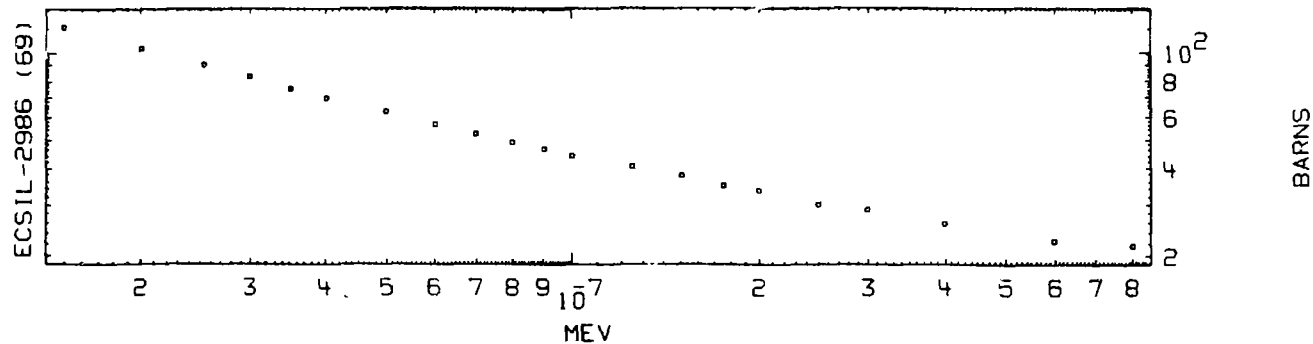
72-HF-177

REFERENCE	ENERGY MEV	DELTA MEV	N-SEC BARNs	DELTA HALF-LIFE BARNs SECONDS
62 2638	2.5300- 8		1.4000+ 0	6.0000- 1 4.3000+ 0

03/01/74

TOTAL
CROSS SECTION

72-HF-178



03/01/74

N, GAMMA

72-HF-178

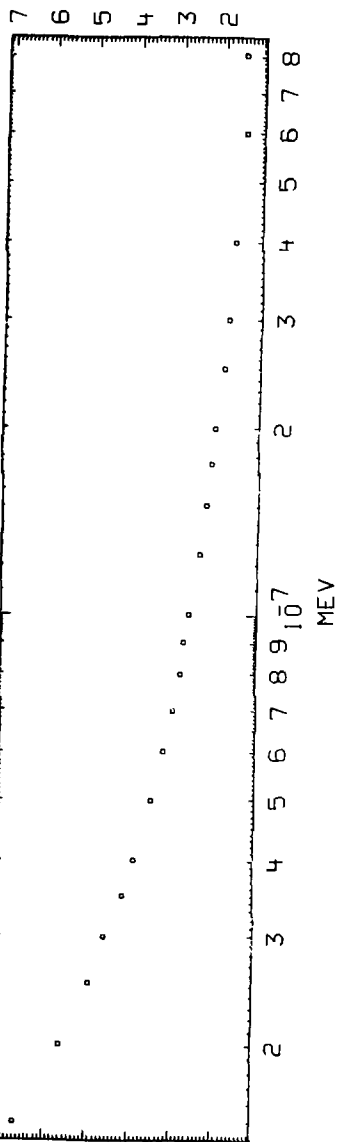
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA HALF-LIFE BARNs SECONDS
62 2638	2.5300- 8		5.0000+ 1	1.5000+ 1 1.8600+ 1

03/01/74

72-HF-179

TOTAL
CROSS SECTION

EC31L-2986 (69)

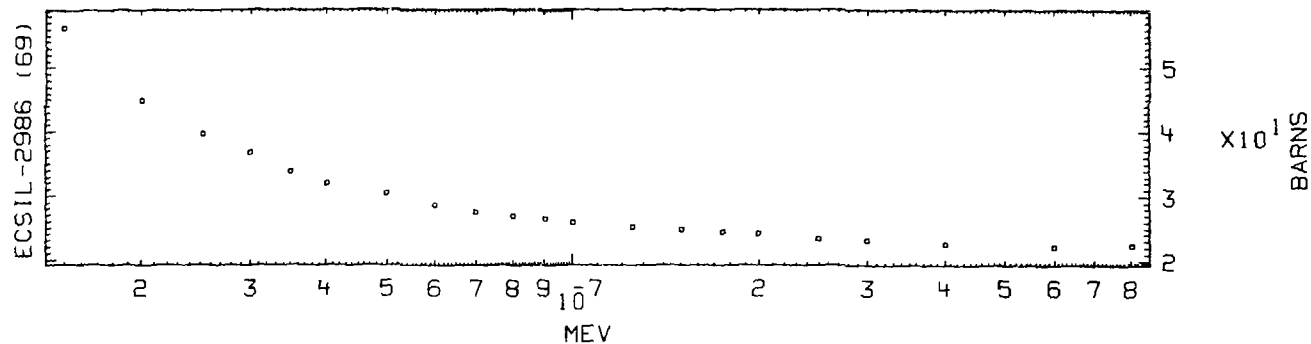


BARN
 $\times 10^1$

03/01/74

TOTAL
CROSS SECTION

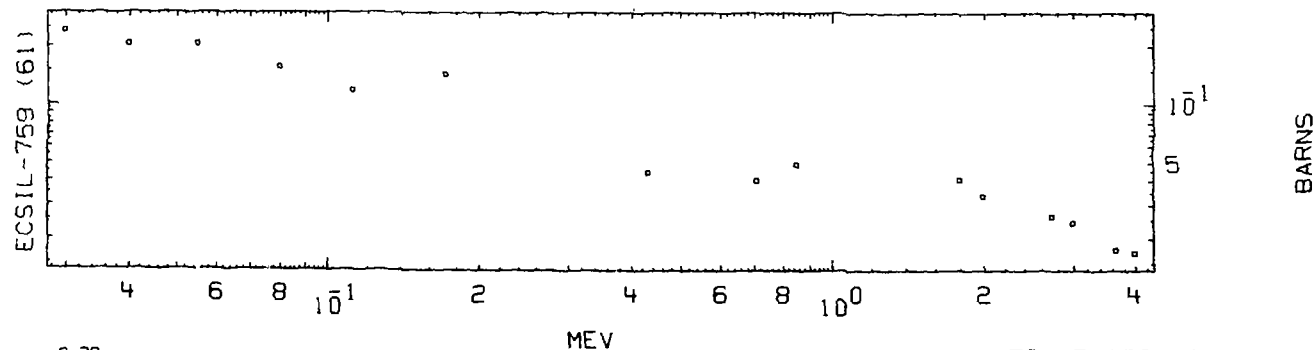
72-HF-180



03/01/74

N, GAMMA
CROSS SECTION

72-HF-180



03/01/74

N. GAMMA
CROSS SECTION

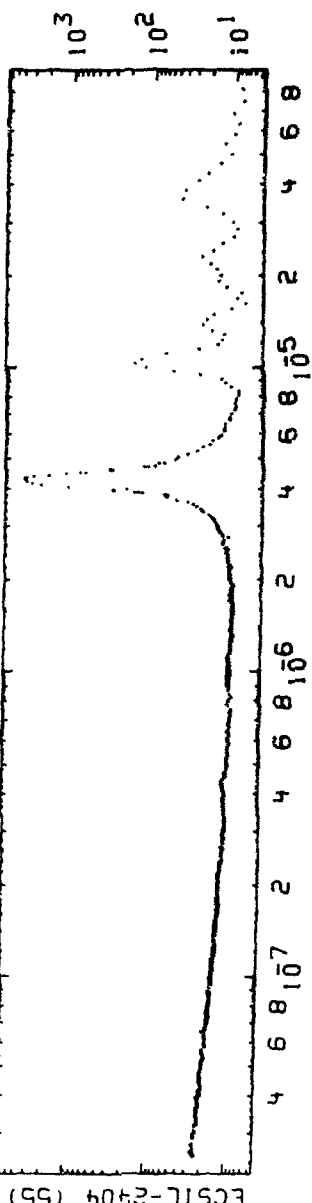
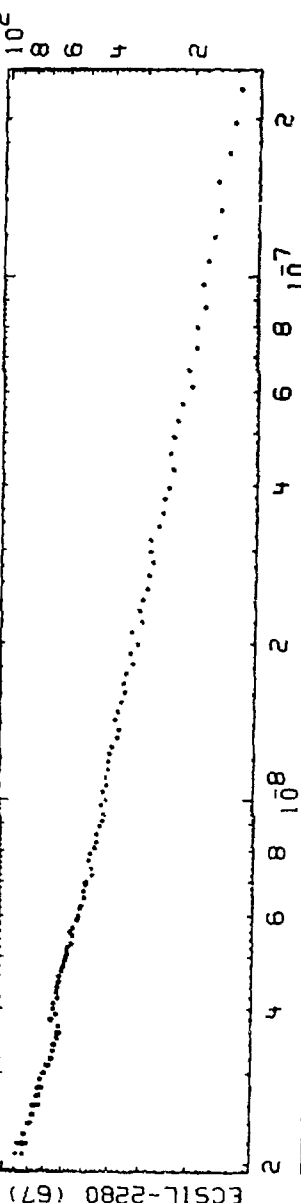
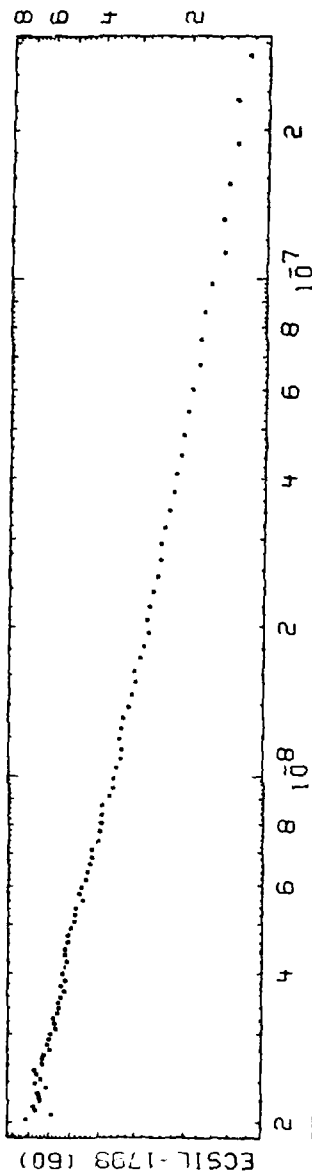
72-HF-180

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
47 888	2.5300- 8		1.0000+ 1	2.0000+ 0
57 305	2.4000- 2	5.0000- 3	4.4100- 1	6.6010- 2

03/01/74

TOTAL CROSS SECTION

73-TA-NAT



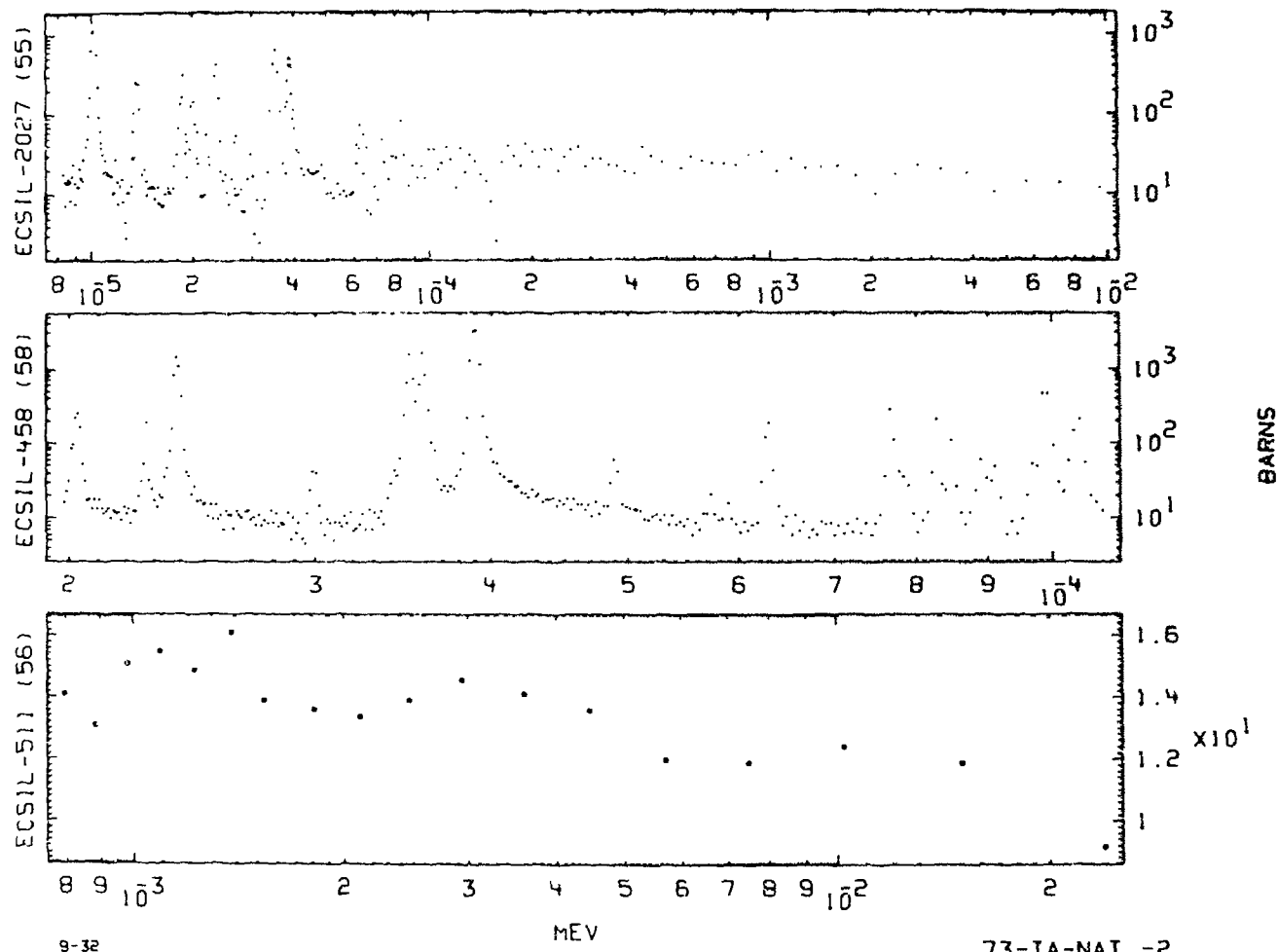
9-31

73-TA-NAT -1

03/01/74

TOTAL CROSS SECTION

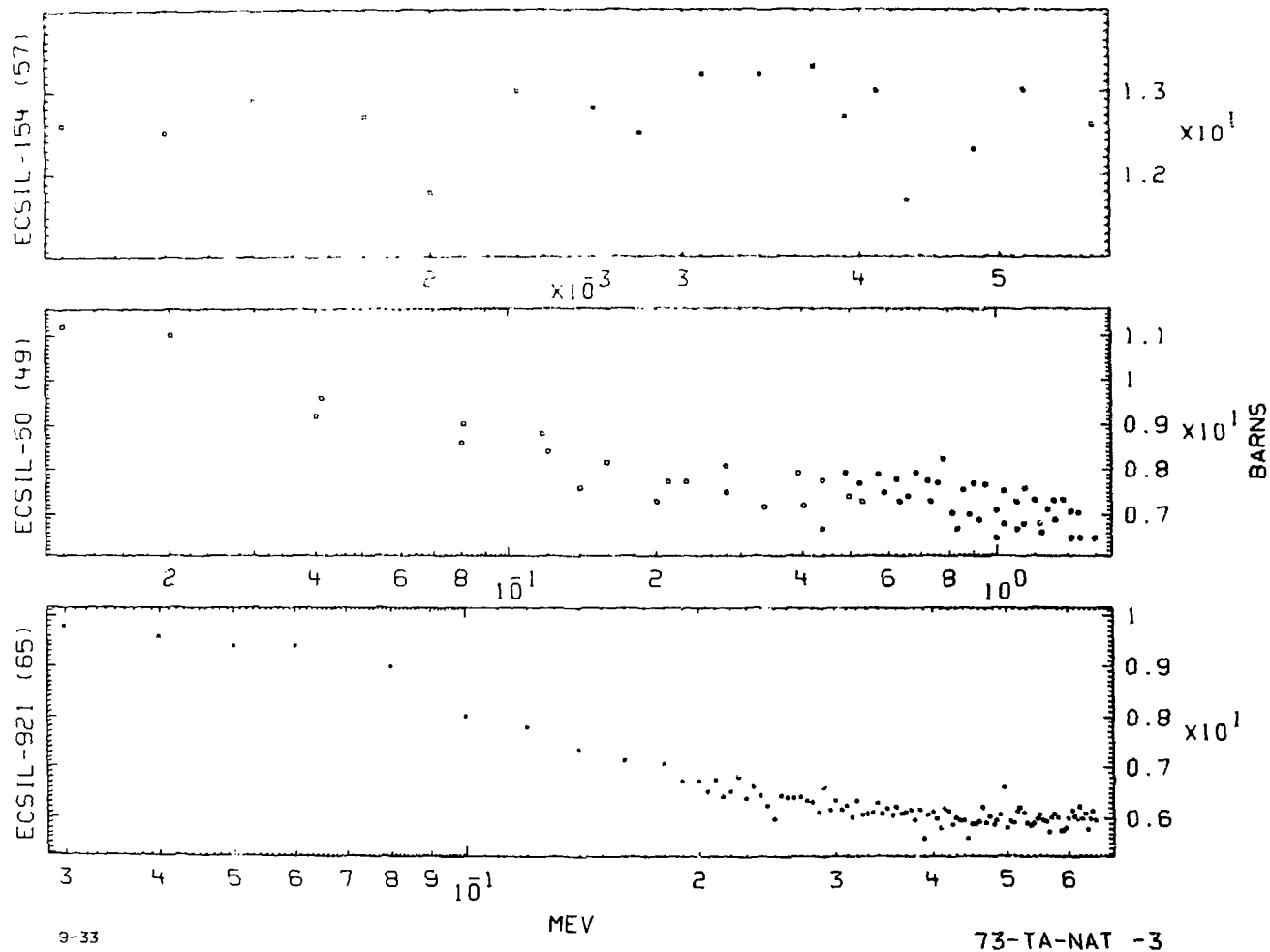
73-TA-NAT



03/01

TOTAL
CROSS SECTION

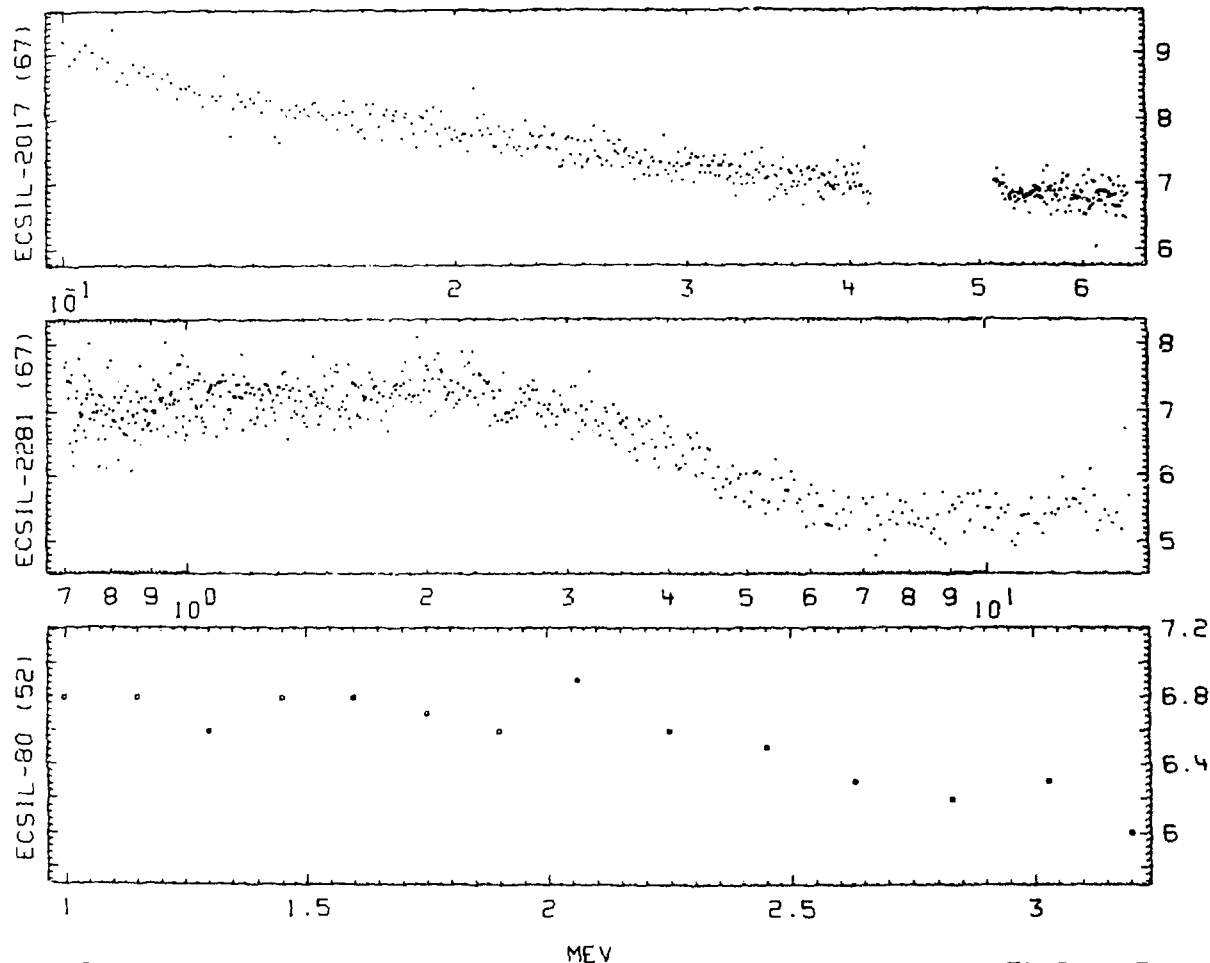
73-TA-NAT



03/01/74

TOTAL CROSS SECTION

73-TA-NAT

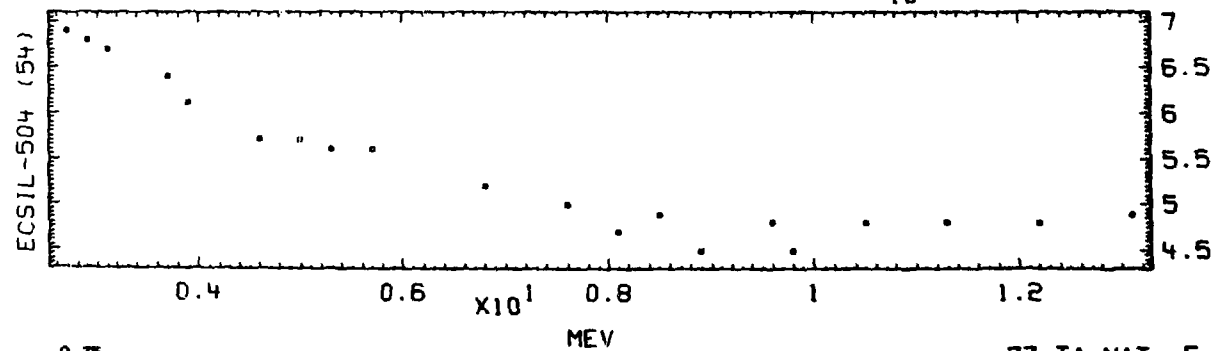
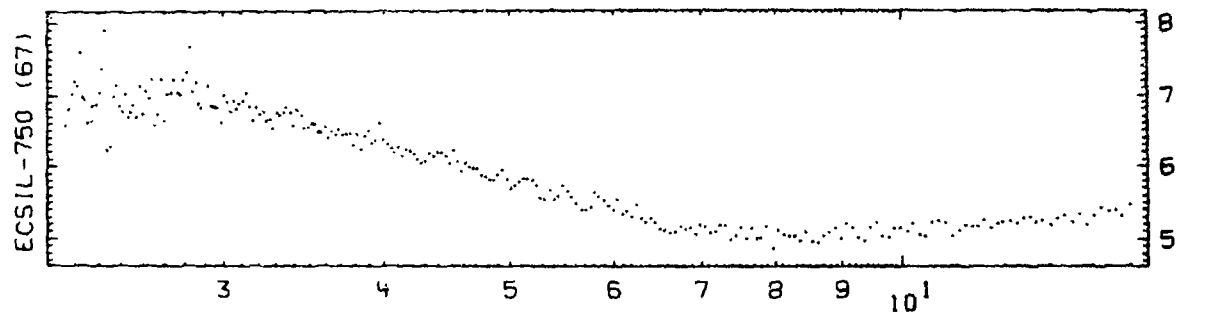
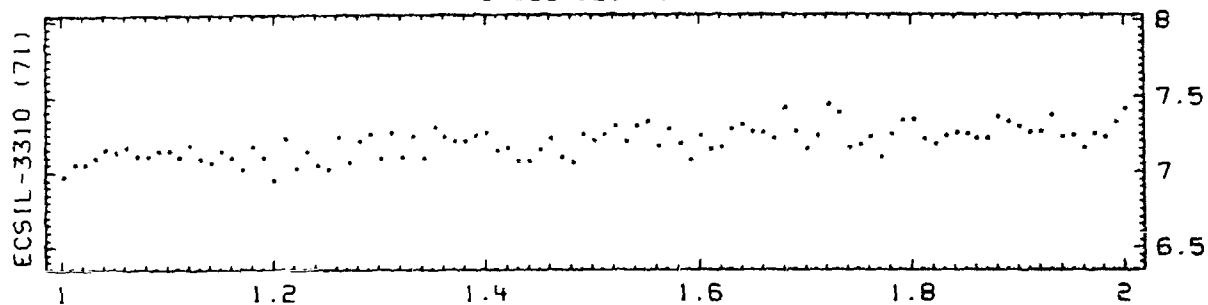


BARN

03/01/74

TOTAL
CROSS SECTION

73-TA-NAT



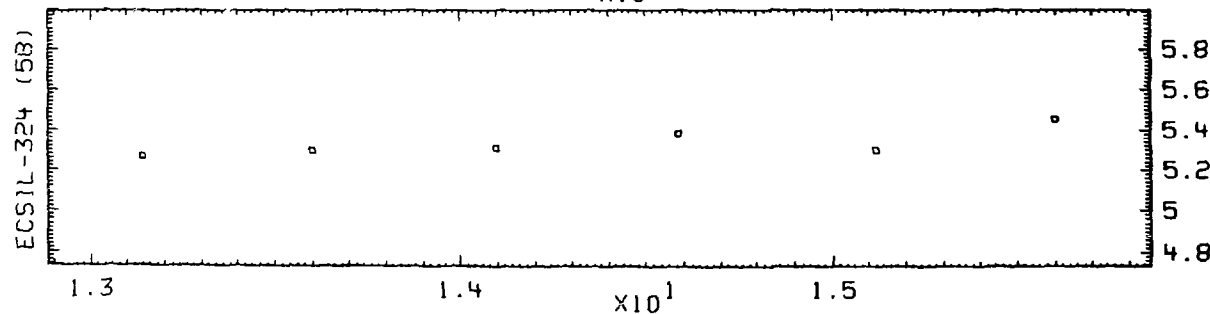
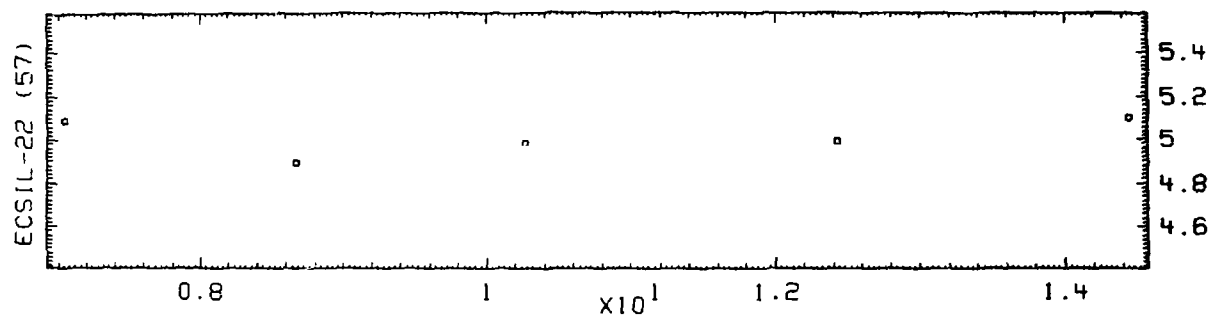
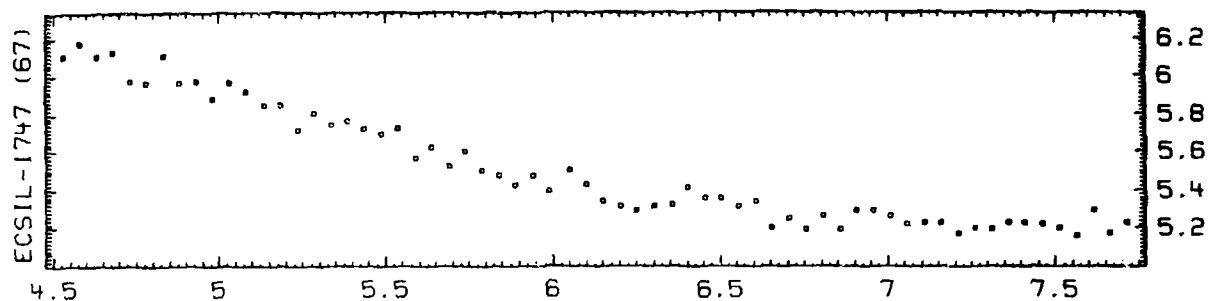
9-35

73-TA-NAT -5

03/01/74

TOTAL CROSS SECTION

73-TA-NAT

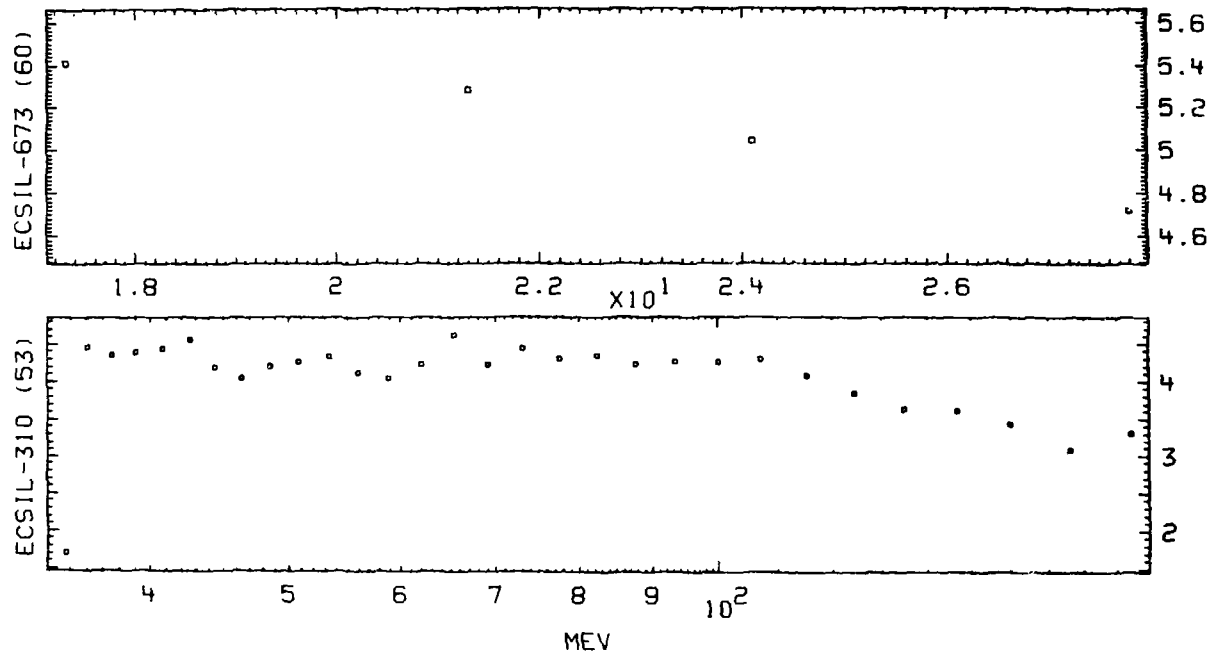


BARNs

03/01/74

TOTAL CROSS SECTION

73-TA-NAT

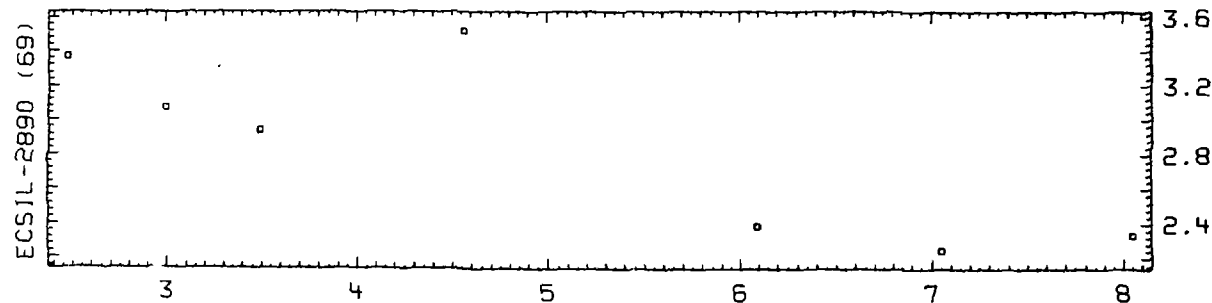
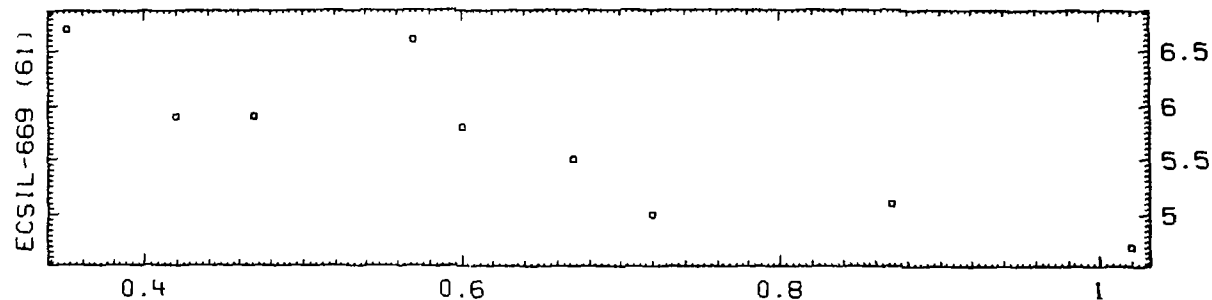
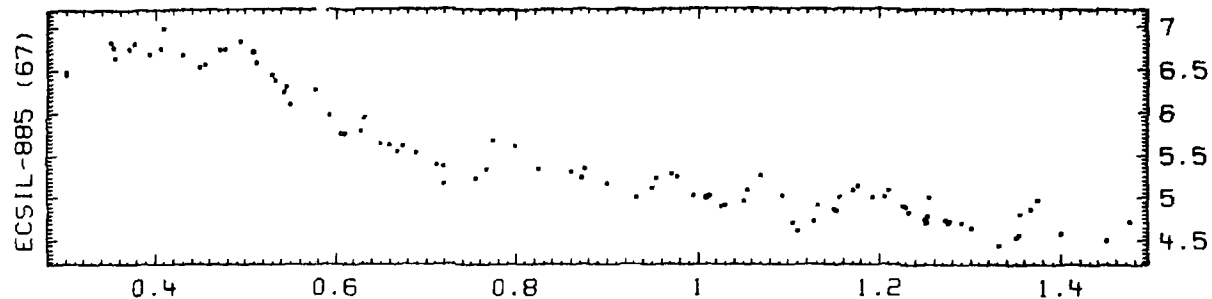


BARNs

03/01/74

ELASTIC CROSS SECTION

73-TA-NAT

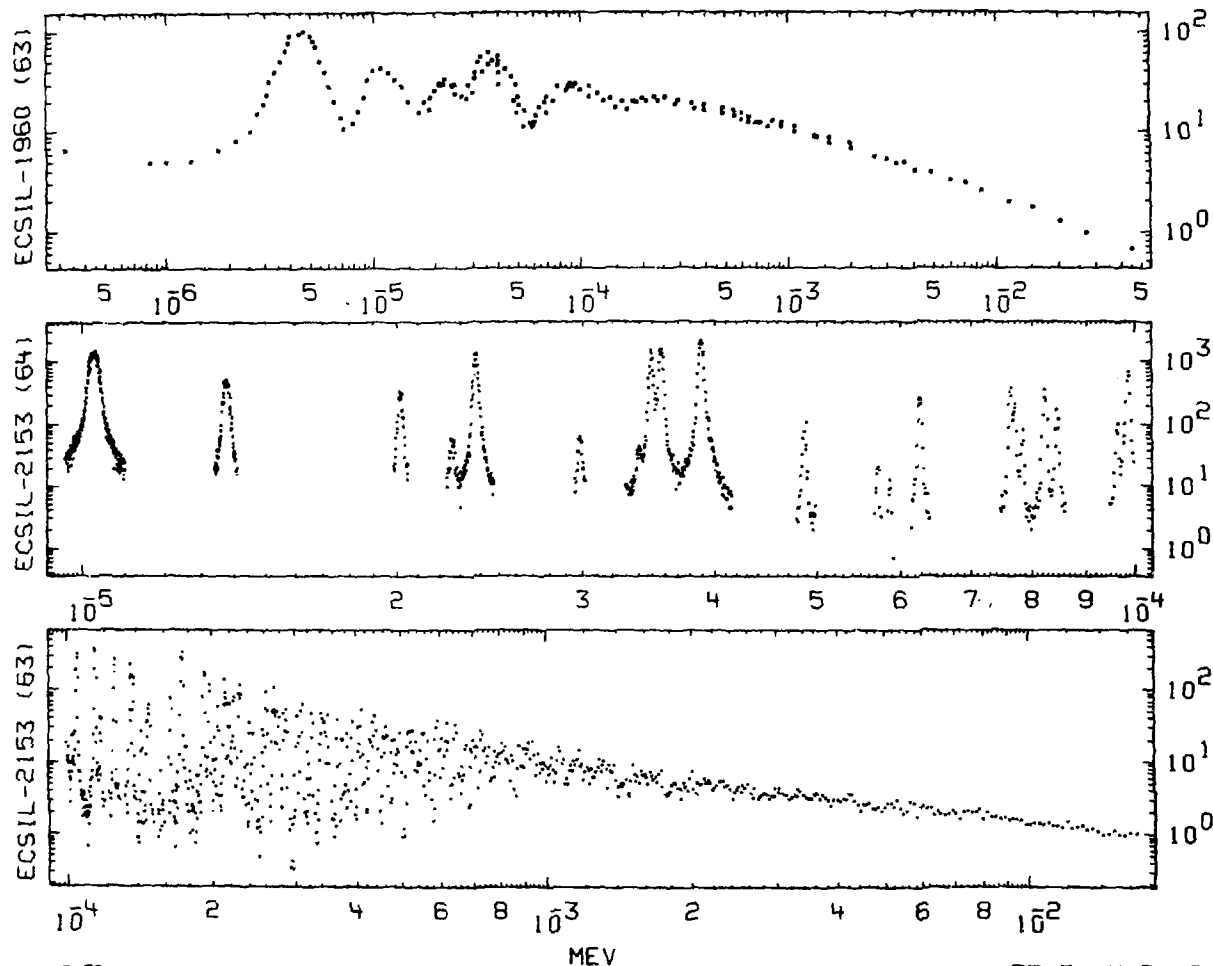


BARNs

03/01/74

N, GAMMA
CROSS SECTION

73-TA-NAT



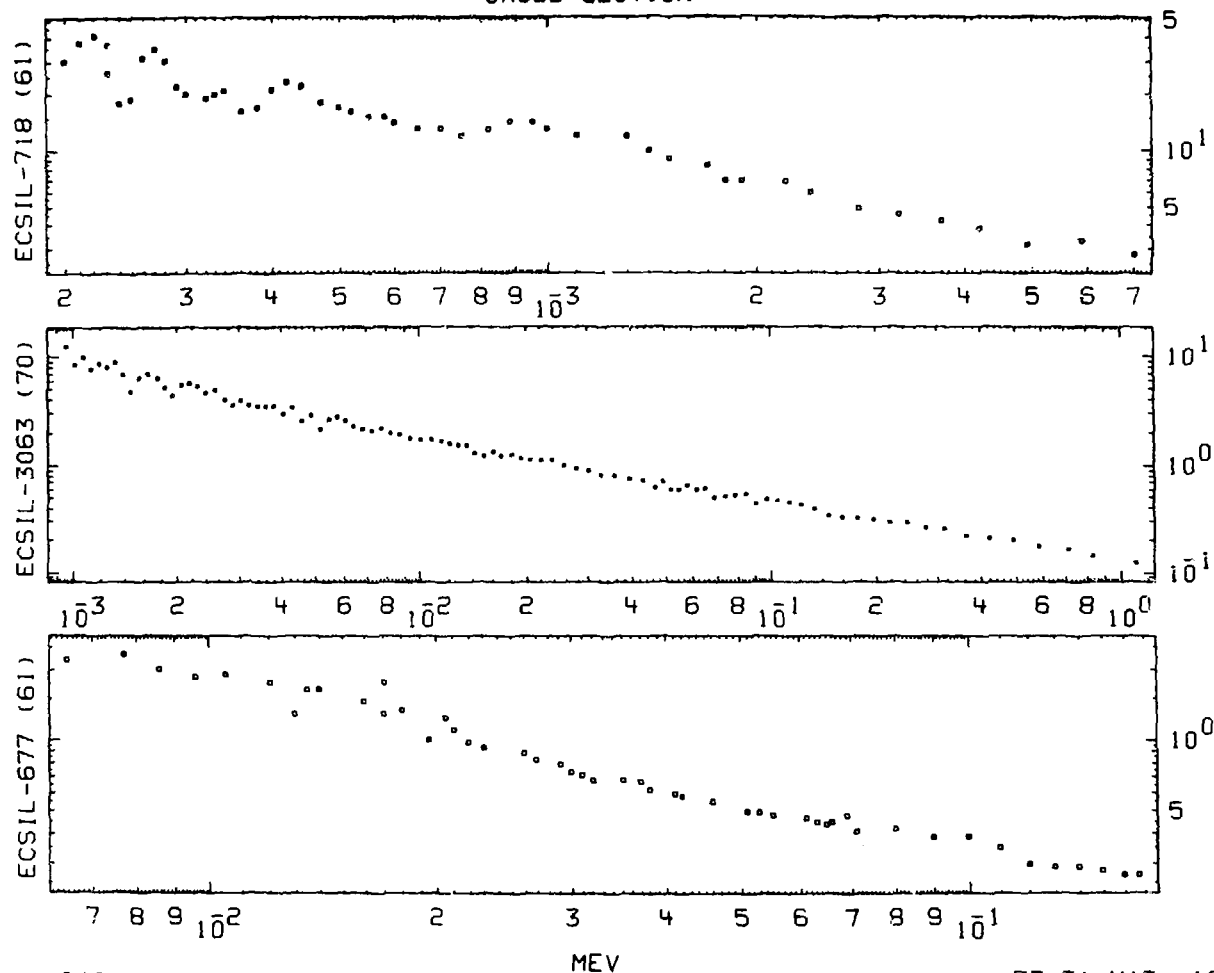
9-39

73-TA-NAT -9

03/01/74

N,GAMMA CROSS SECTION

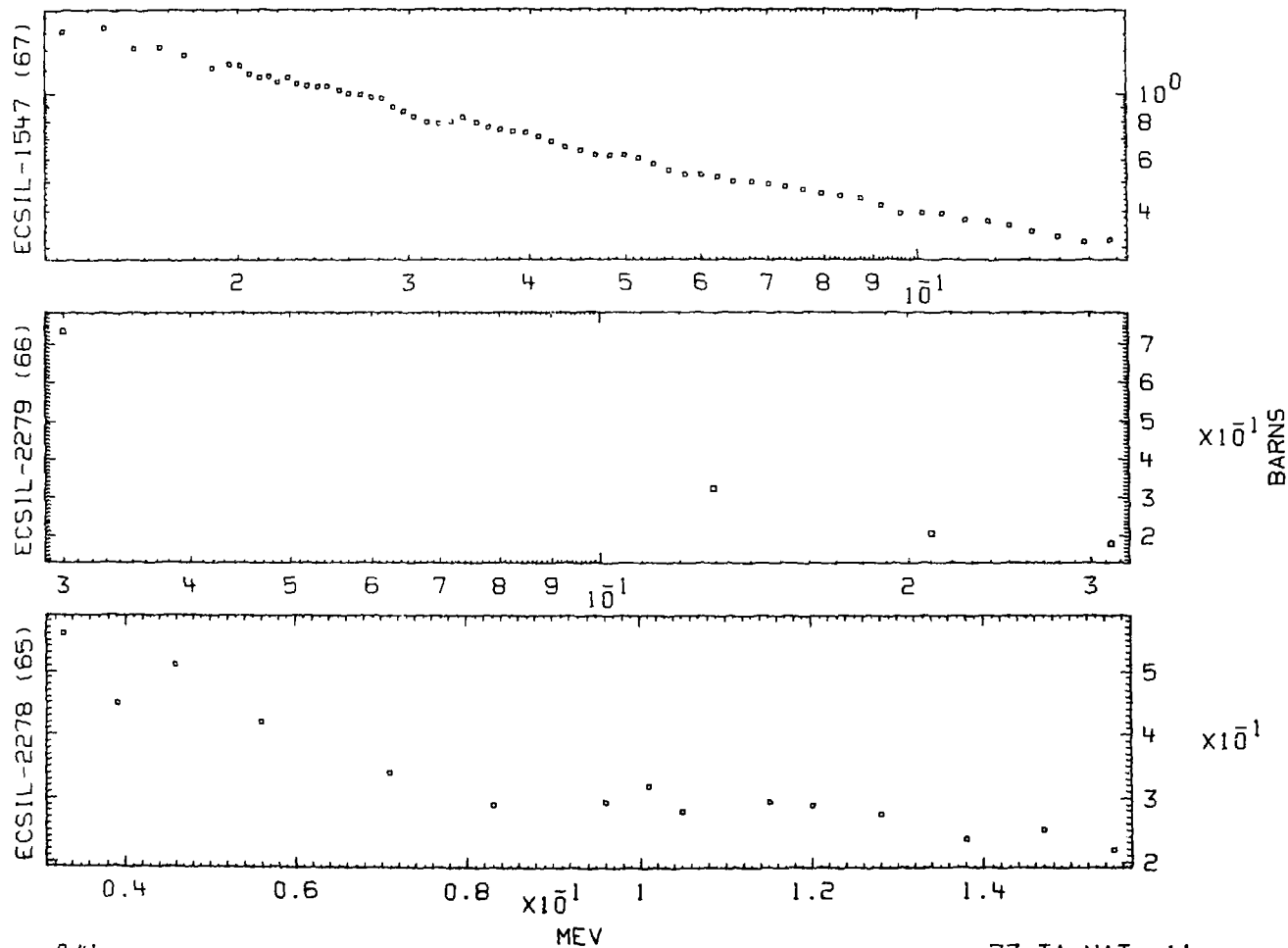
73-TA-NAT



03/01/74

N, GAMMA
CROSS SECTION

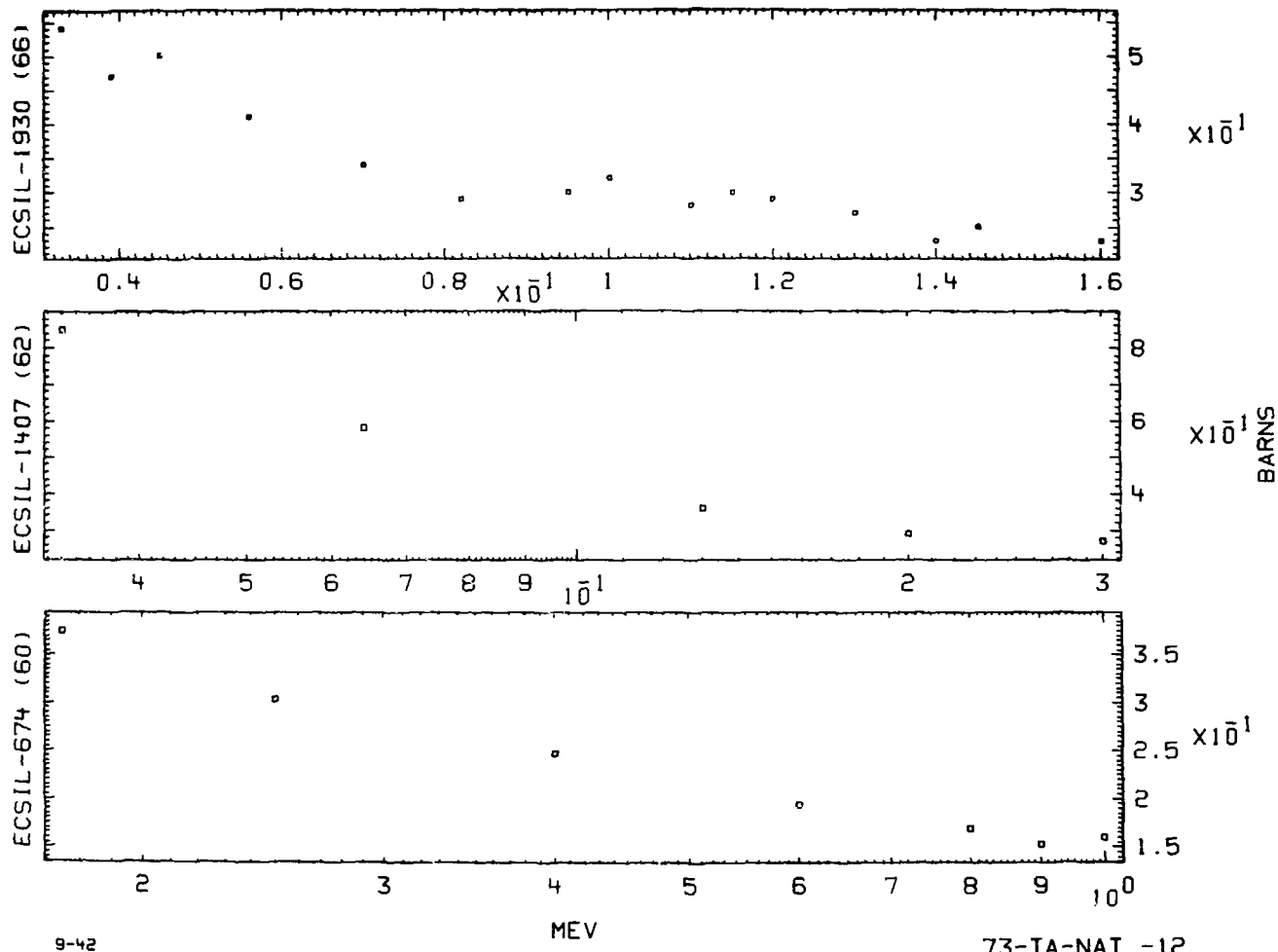
73-TA-NAT



03/01/74

N, GAMMA
CROSS SECTION

73-TA-NAT



03/01/74

TOTAL
CROSS SECTION

73-TA-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
49 844	1.1500- 4	1.1500- 5	1.1300+ 1	
49 844	3.0000- 4	3.0000- 5	9.6010+ 0	
53 100	1.0000- 2	1.0000- 3	1.3500+ 1	1.0000+ 0
55 296	4.1000+ 0	4.0000- 2	6.4010+ 0	2.0000- 1
52 81	1.4000+ 1		5.2410+ 0	1.0000- 1
50 281	4.2000+ 1	1.0000+ 0	4.2000+ 0	4.0000- 2

03/01/74

ELASTIC

73-TA-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
61 1652	9.0100- 1		4.3700+ 0	1.4000- 1
54 103	1.0000+ 0	8.0000- 2	5.1000+ 0	7.6500- 1
65 1509	2.0000+ 0	5.0000- 2	4.1000+ 0	

03/01/74

N, GAMMA

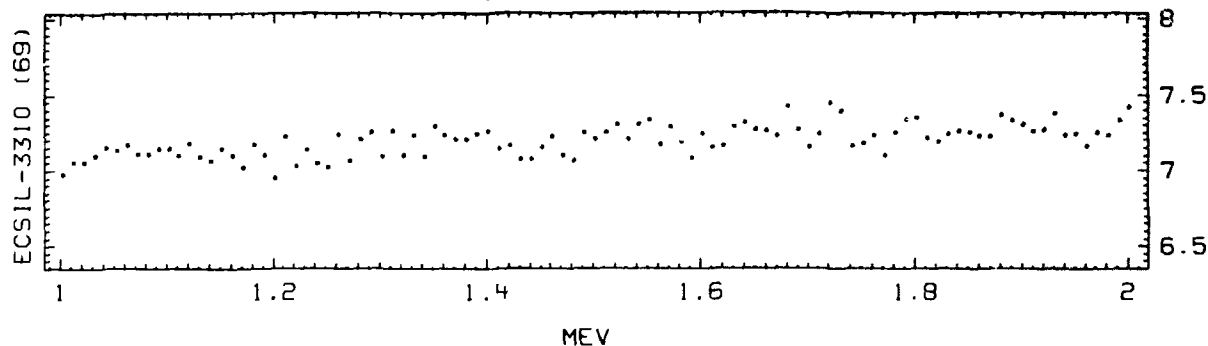
73-TA-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63 799	3.0000- 2	3.0000- 3	6.3010- 1	1.3000- 1
63 1	3.0000- 2	8.0010- 3	7.3510- 1	6.6010- 2
63 1	6.5000- 2	2.1000- 2	4.4000- 1	4.0000- 2
58 363	2.0000- 1		5.3000- 1	7.7000- 2
71 3194	1.4000+ 1		9.4700- 4	2.3570- 4

03/01/74

TOTAL
CROSS SECTION

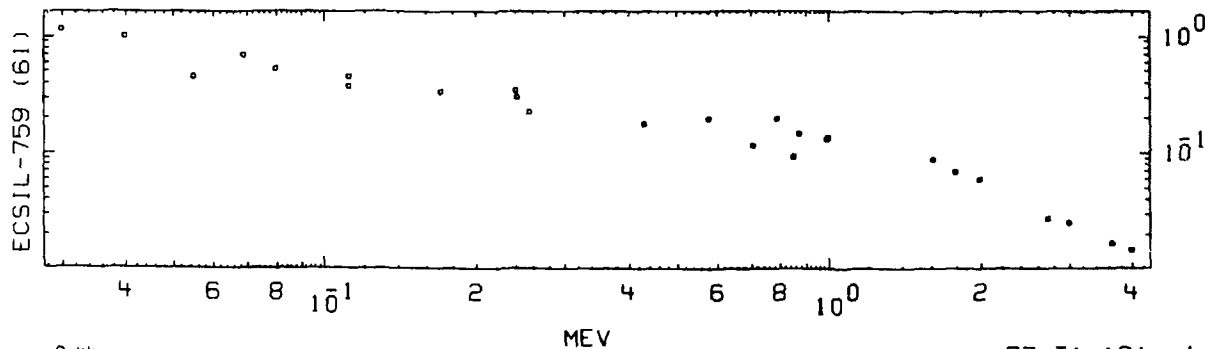
73-TA-181



03/01/74

N, GAMMA
CROSS SECTION

73-TA-181



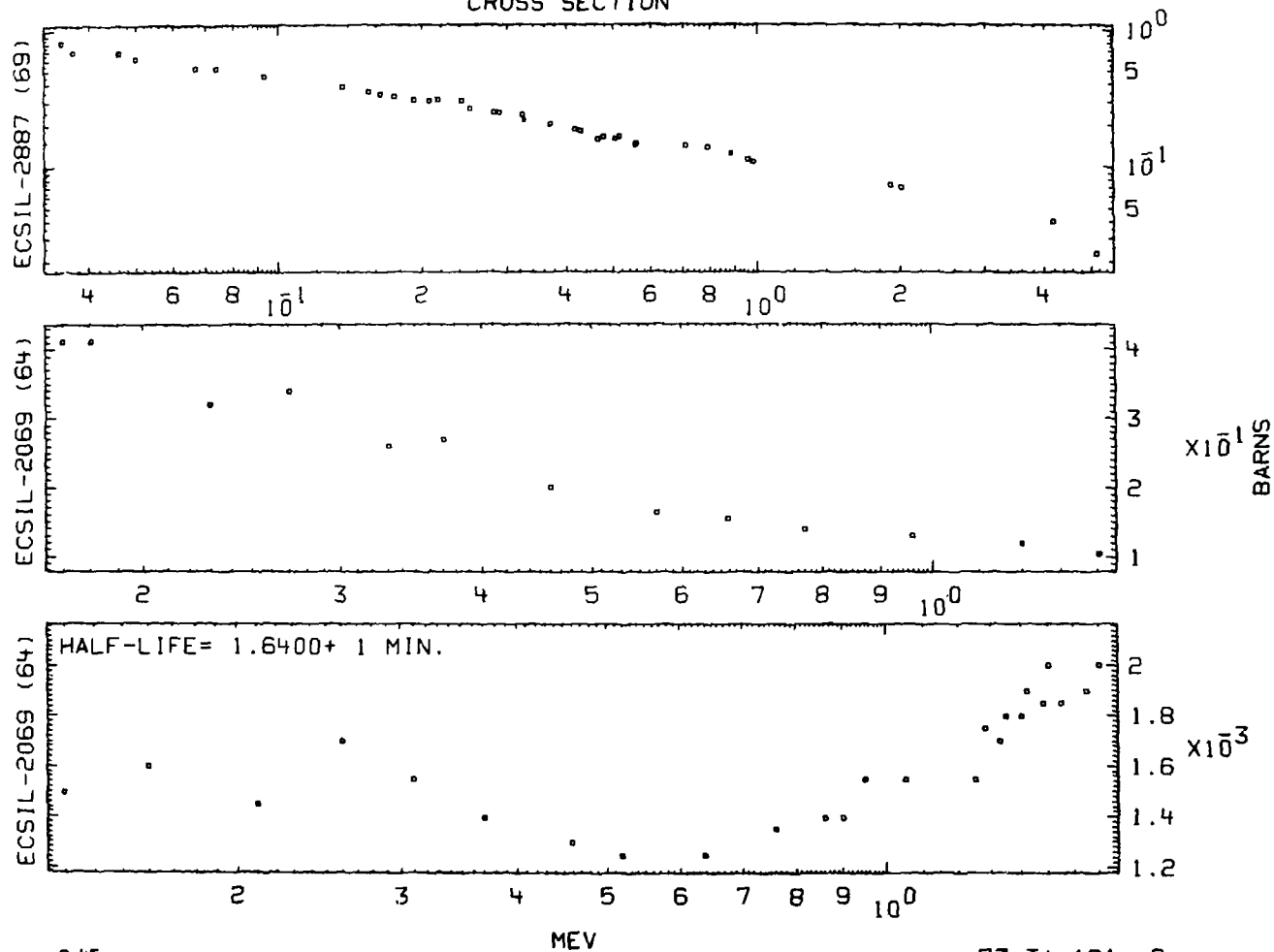
9-44

73-TA-181 -1

03/01/74

N, GAMMA
CROSS SECTION

73-TA-181



03/01/74

N, GAMMA
CROSS SECTION

73-TA-181

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
64	2645	2.5300- 8	2.7000+ 1	3.0000+ 0	56	9	4.0000- 1	9.0010- 2	2.2000- 1
58	363	2.0000- 1	3.7000- 1	4.0000- 2					1.3000- 2

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE MINUTES
64	2645	2.5300- 8	6.4000- 3	6.0000- 4	1.6000+ 1

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE DAYS	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE DAYS
57	23	2.1000- 2	4.0000- 3	1.3600+ 0	3.1000- 1	1.1200+ 2	47	888	2.5300- 8	2.0600+ 1	4.1200+ 0
											1.1700+ 2

73-TA-181

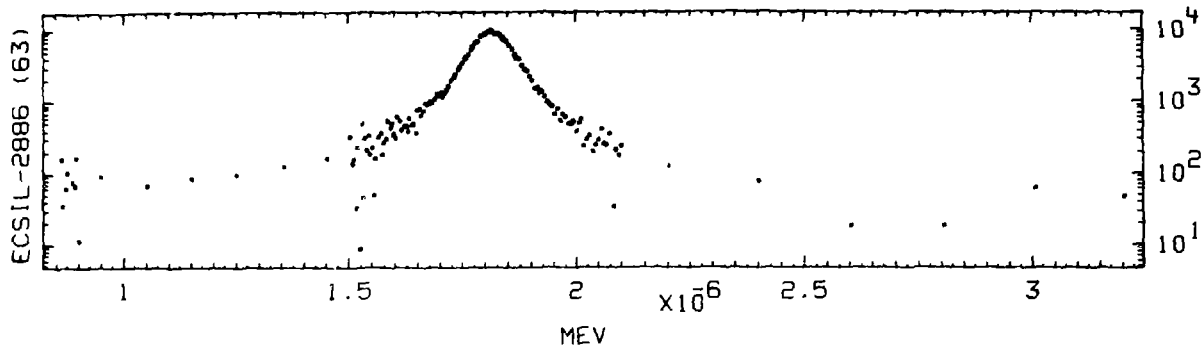
73-TA-181 -4

9-47

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TOTAL
CROSS SECTION

73-TA-182



03/01/74

TOTAL

73-TA-182

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 2315	2.5300- 8		8.2000+ 3	6.0000+ 2

03/01/74

N, GAMMA

73-TA-182

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
57 275	2.5000- 2	5.0000- 3	1.2800+ 0	1.5000- 1

74-W -NAT

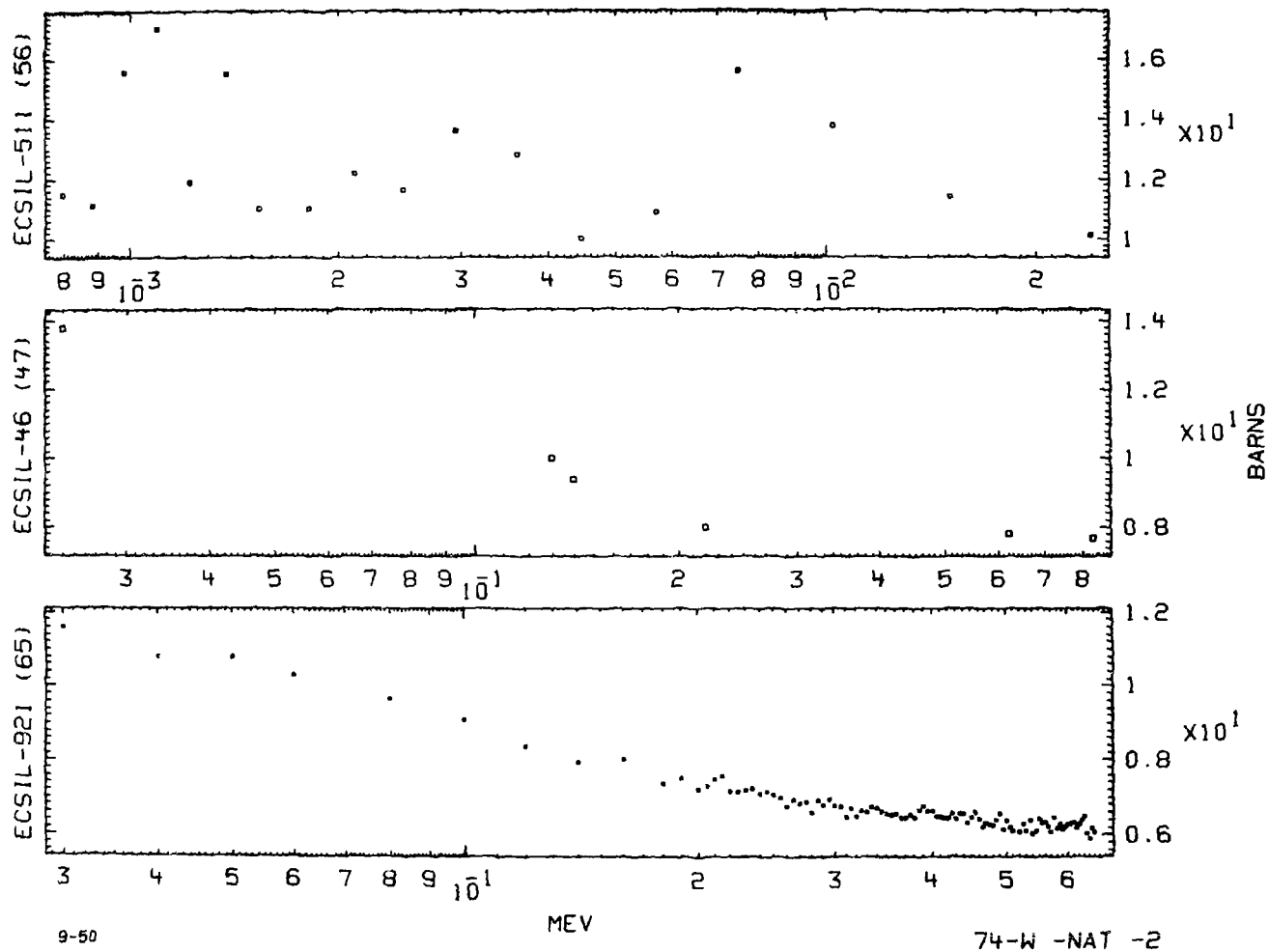


74-W -NAT -1

03/01/74

TOTAL
CROSS SECTION

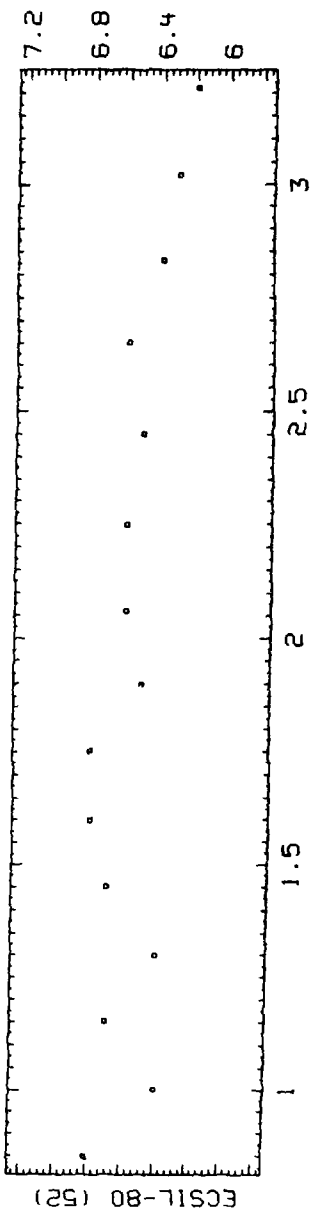
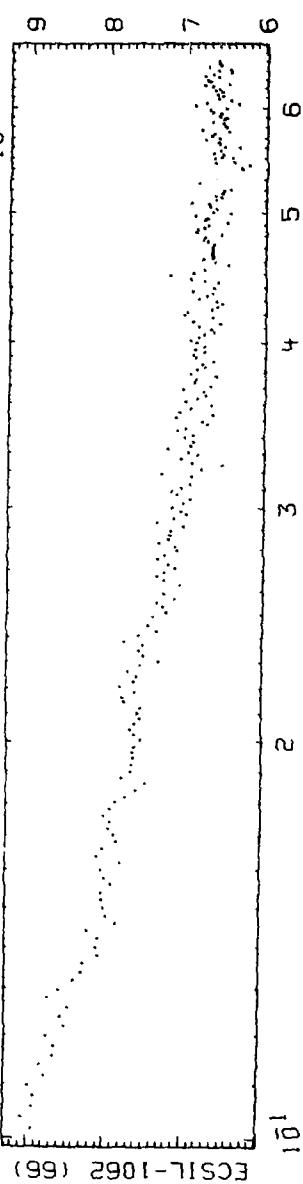
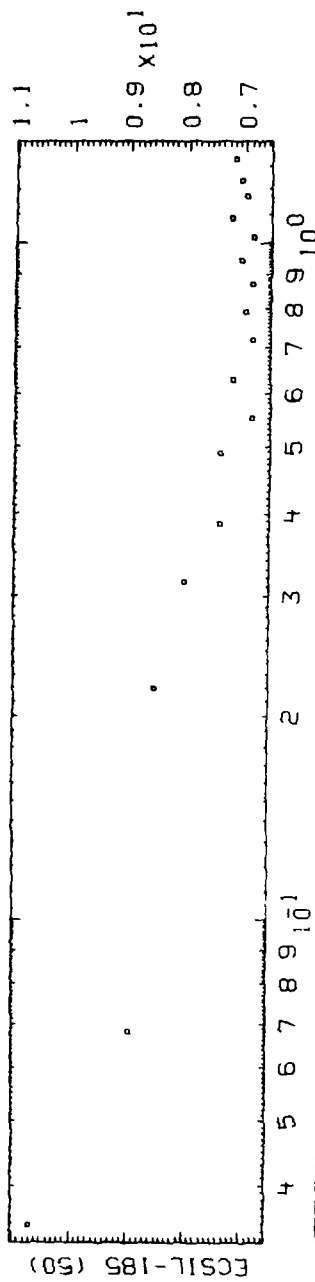
74-W -NAT



03/01/74

TOTAL
CROSS SECTION

74-W -NAT



BARNs

MEV

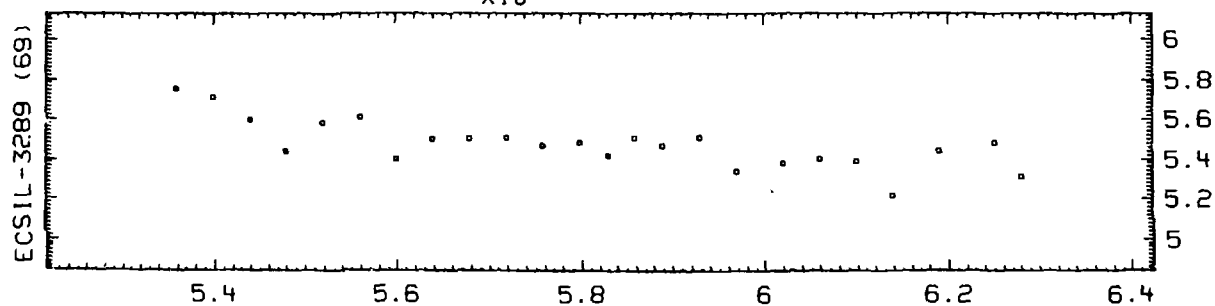
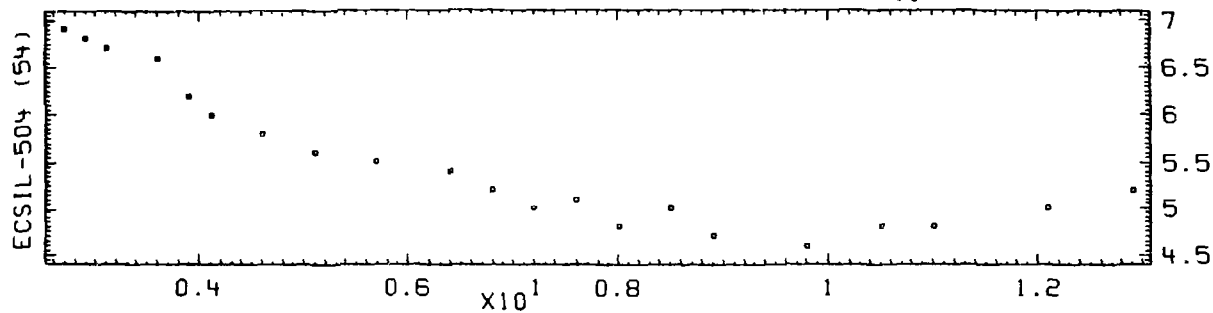
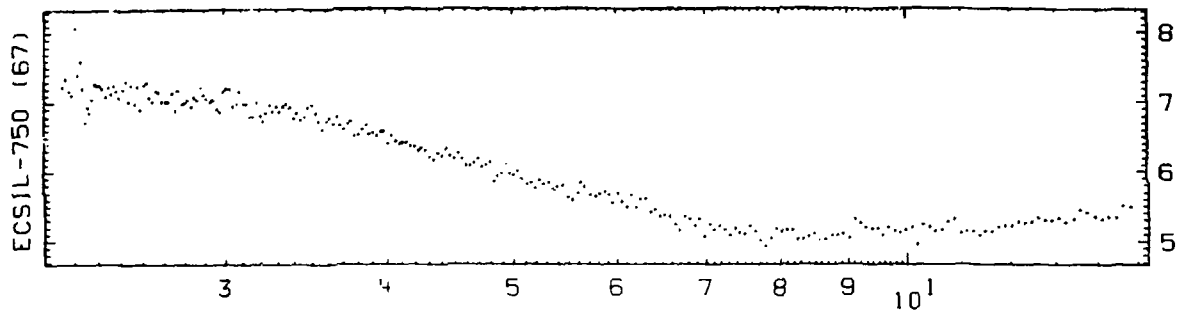
9-51

74-W -NAT -3

03/01/74

TOTAL
CROSS SECTION

74-W -NAT



9-52

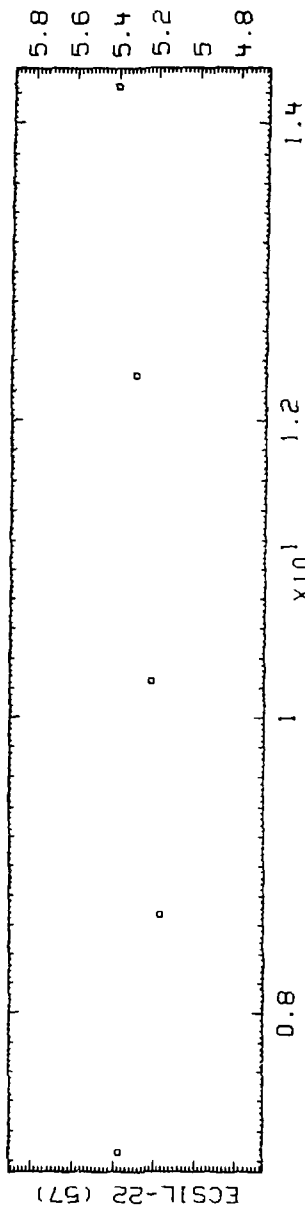
74-W -NAT -4

BARNs

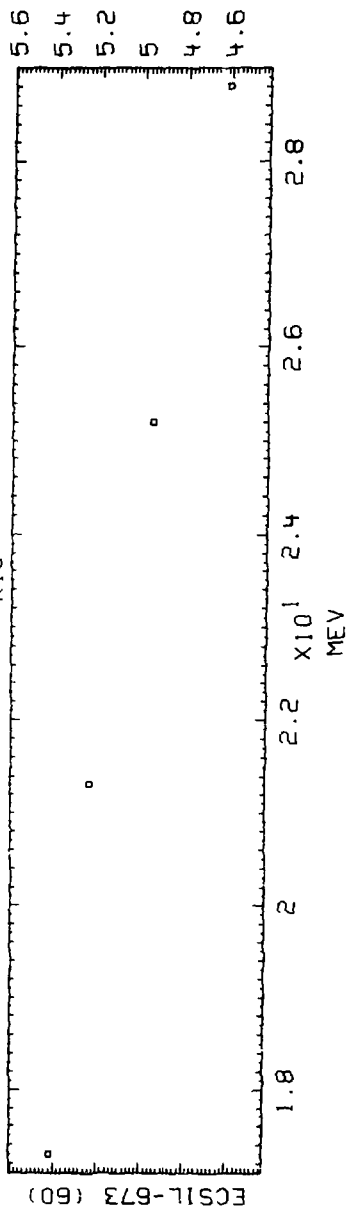
03/01/74

TOTAL
CROSS SECTION

74-W -NAT



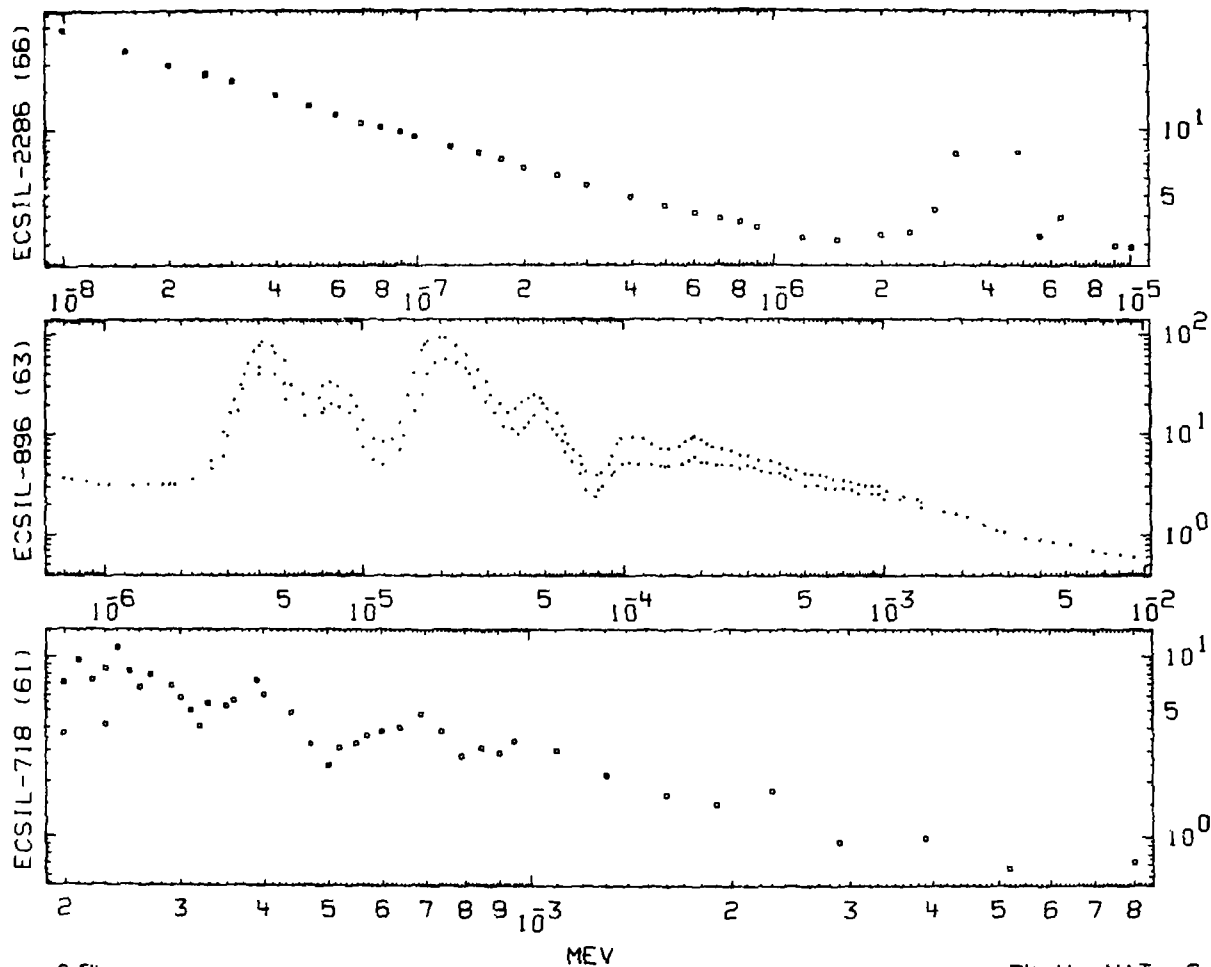
BARNs



03/01/74

N, GAMMA
CROSS SECTION

74-W -NAT



9-54

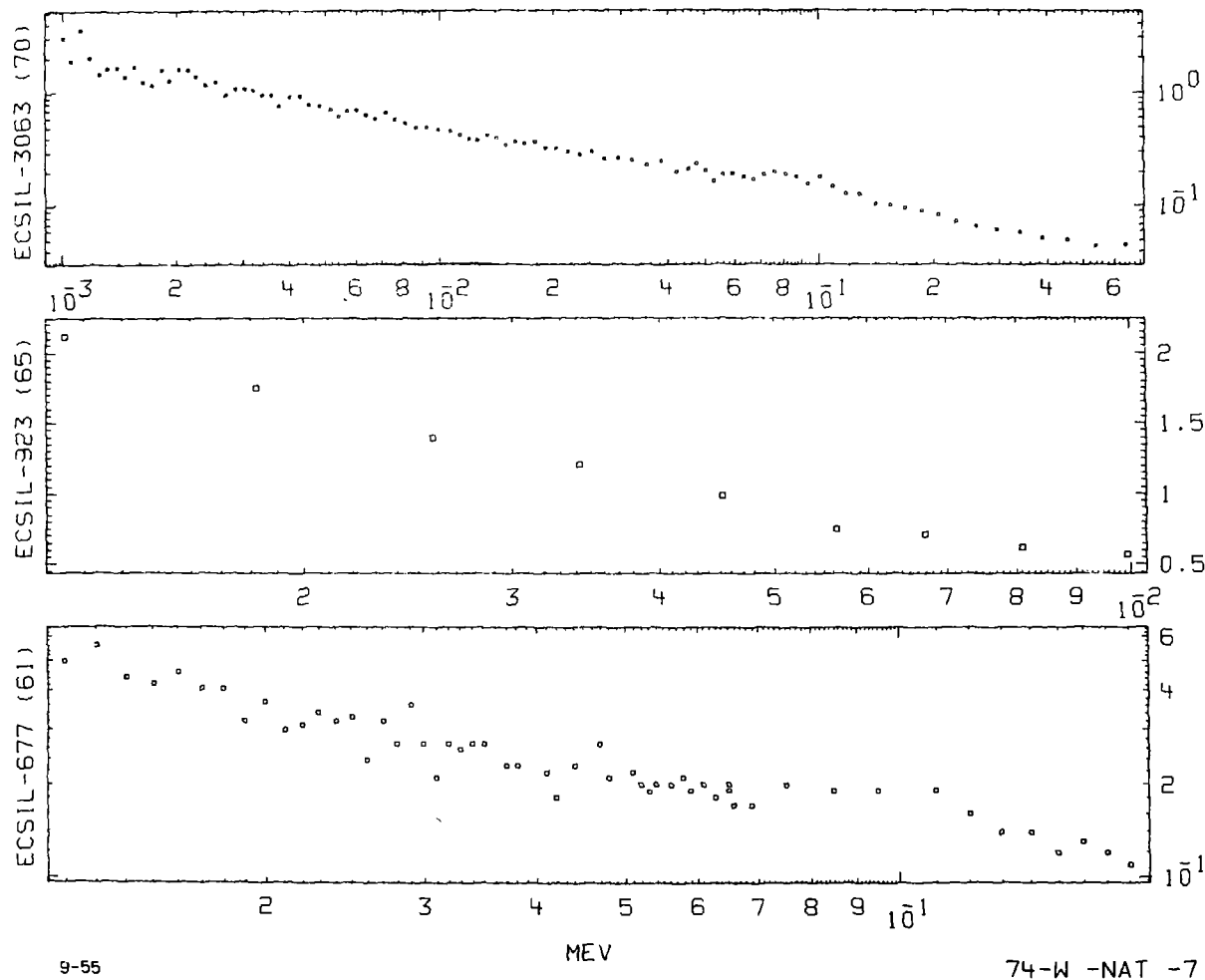
MEV

74-W -NAT -6

03/01/74

N.GAMMA
CROSS SECTION

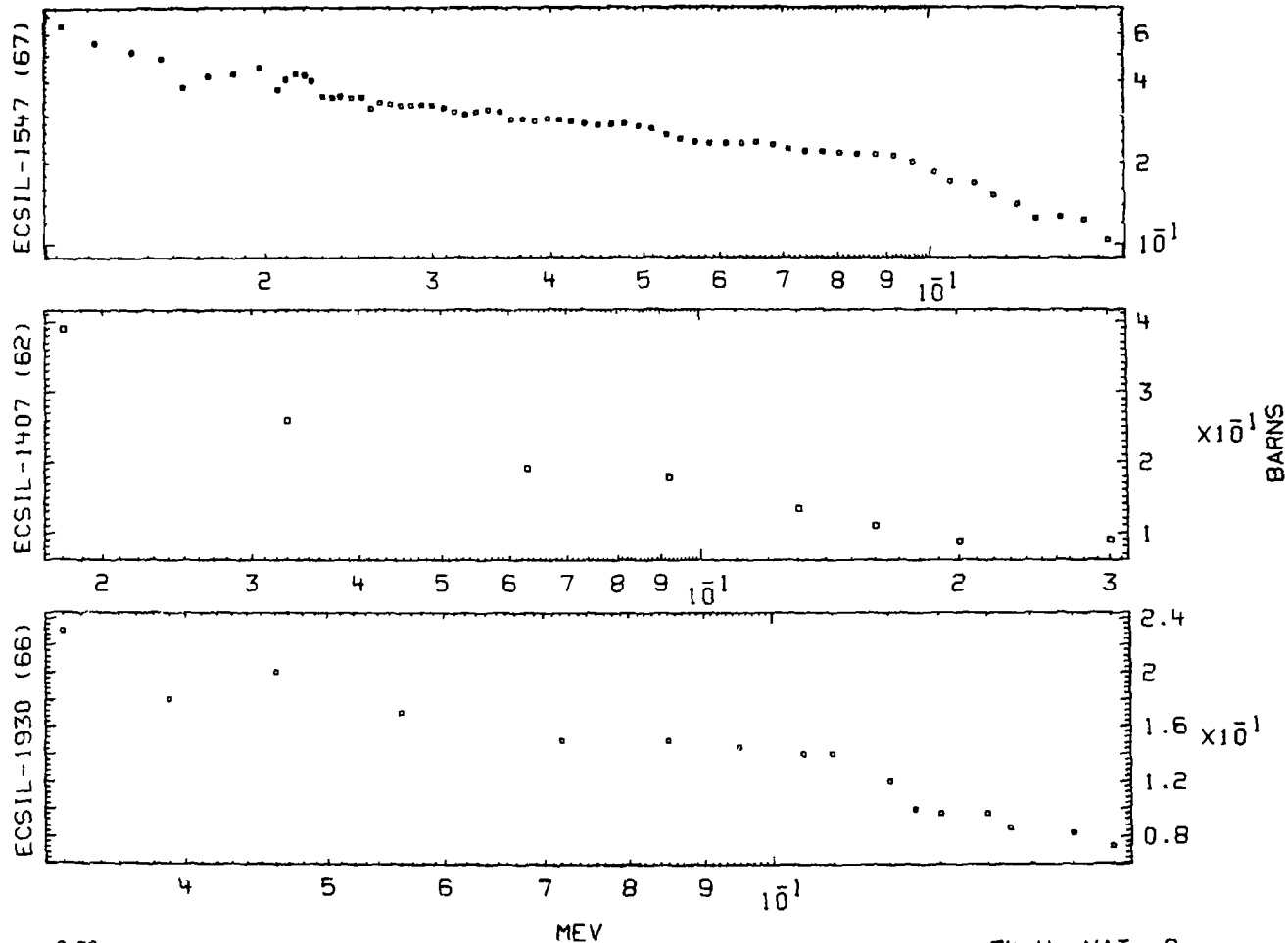
74-W -NAT



03/01/74

N, GAMMA
CROSS SECTION

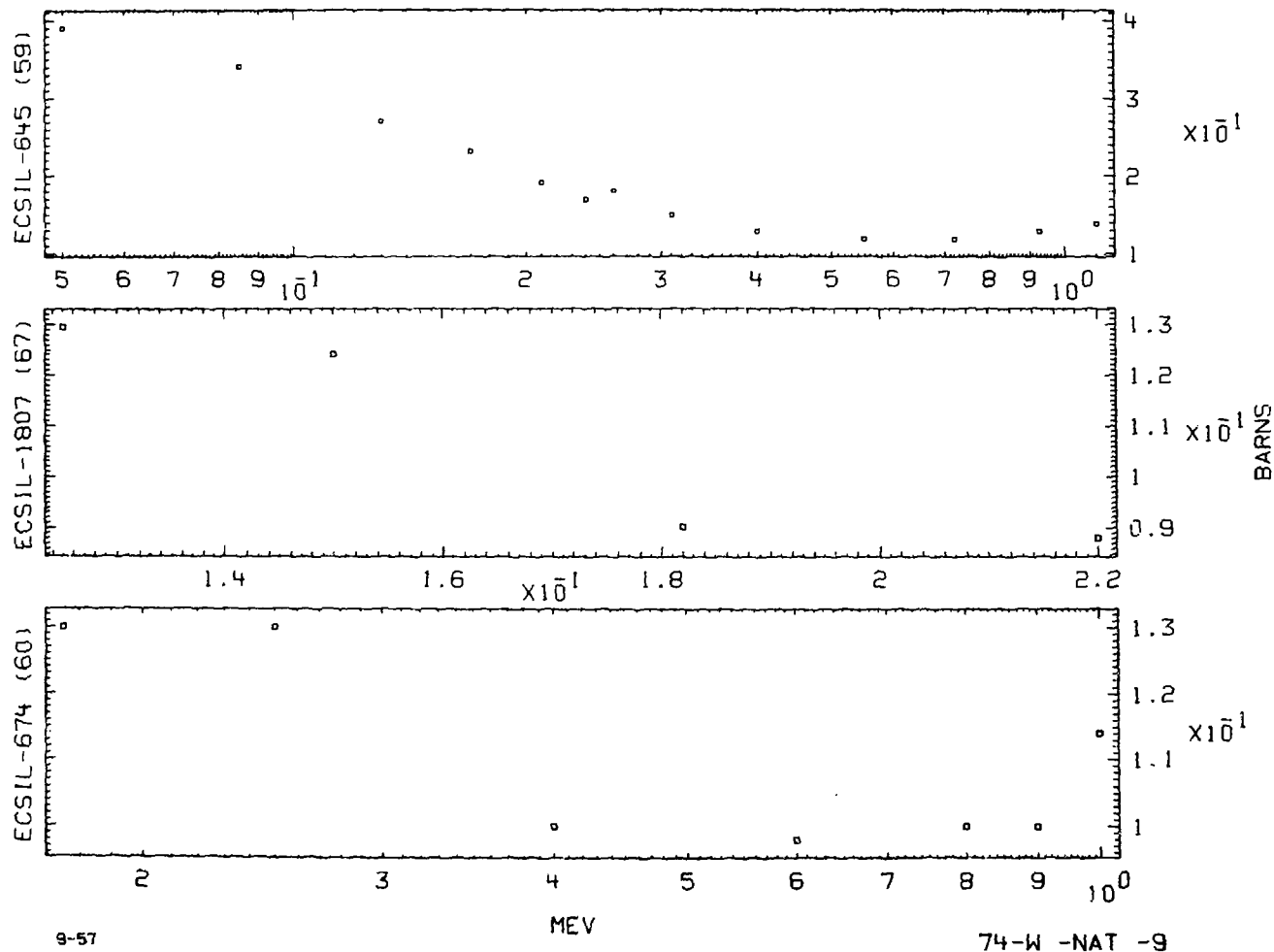
74-W -NAT



03/01/74

N, GAMMA
CROSS SECTION

74-W -NAT



9-57

MEV

74-W -NAT -9

03/01/74

TOTAL
CROSS SECTION

74-W -NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
49	844	1.1500- 4	1.1500- 5	8.6210+ 0	52	81	1.4000+ 1	5.3010+ 0	1.1000- 1
49	844	3.0000- 4	3.0000- 5	1.0100+ 1	50	281	4.2000+ 1	1.0000+ 0	4.3100+ 0
47	44	1.0000- 3	1.0000- 4	1.7000+ 1	69	3160	5.7000+ 3	6.0000+ 2	2.9700+ 0
47	44	5.0000- 3	1.0000- 4	1.6000+ 1	71	3180	2.6500+ 4	3.5000+ 3	2.7200+ 0
55	296	4.1000+ 0	4.0000- 2	6.4010+ 0	68	2350	2.7000+ 4	2.3300+ 0	2.0000- 1
52	207	1.4000+ 1		4.8000+ 0					

03/01/74

ELASTIC

74-W -NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
64	1255	3.0000- 1	6.9600+ 0	4.8000- 1
64	1255	5.0000- 1	5.9300+ 0	4.7000- 1
64	1255	8.0000- 1	5.8900+ 0	4.1000- 1
54	103	1.0000+ 0	8.0000- 2	4.7000+ 0
65	1509	2.0000+ 0	5.0000- 2	4.4000+ 0

03/01/74

FISSION

74-W -NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
55	461	3.8000+ 2	3.8000- 3	

03/01/74

N, GAMMA

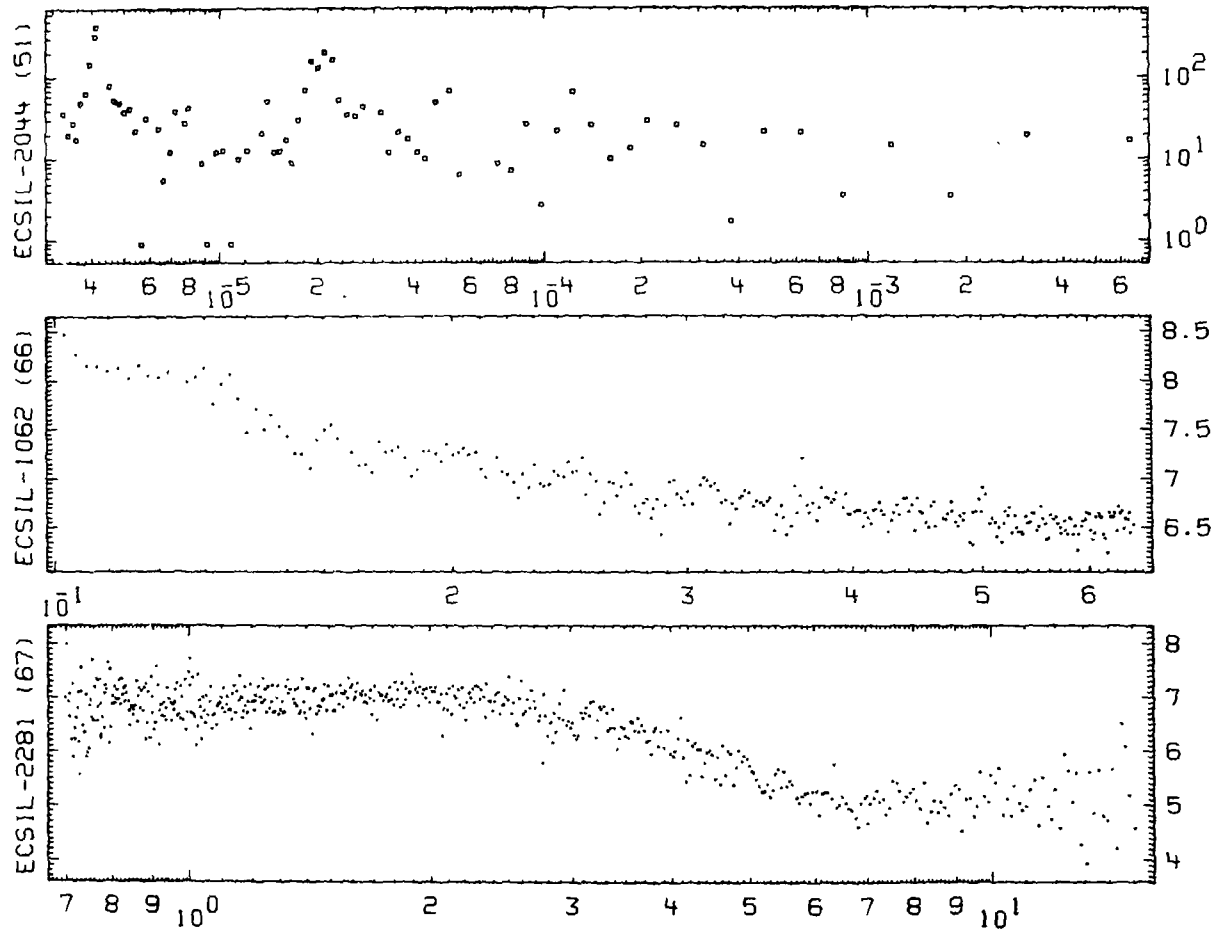
74-W -NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63	793	3.0000- 2	3.0000- 3	1.8400- 1
63	1	3.0000- 2	8.0010- 3	2.7000- 1
63	1	6.5000- 2	2.1000- 2	1.9000- 1
58	353	2.0000- 1	2.0000- 1	3.5000- 2
60	633	8.3000- 1	4.0000- 2	9.1000- 2

03/01/74

TOTAL CROSS SECTION

74-W -182



9-59

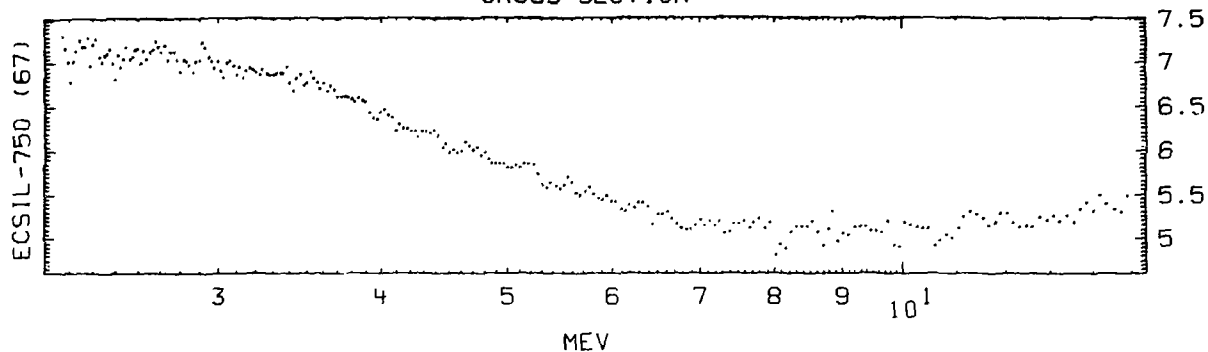
MEV

74-W -182 -1

03/01/74

TOTAL
CROSS SECTION

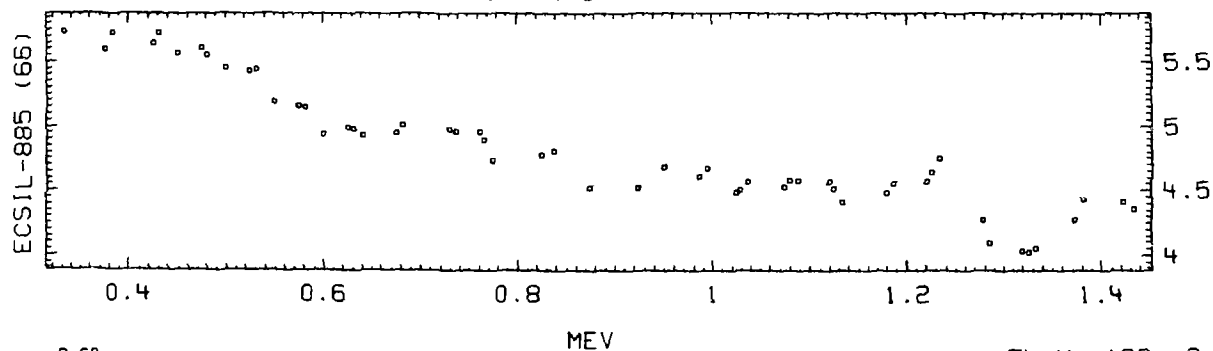
74-W -182



03/01/74

ELASTIC
CROSS SECTION

74-W -182



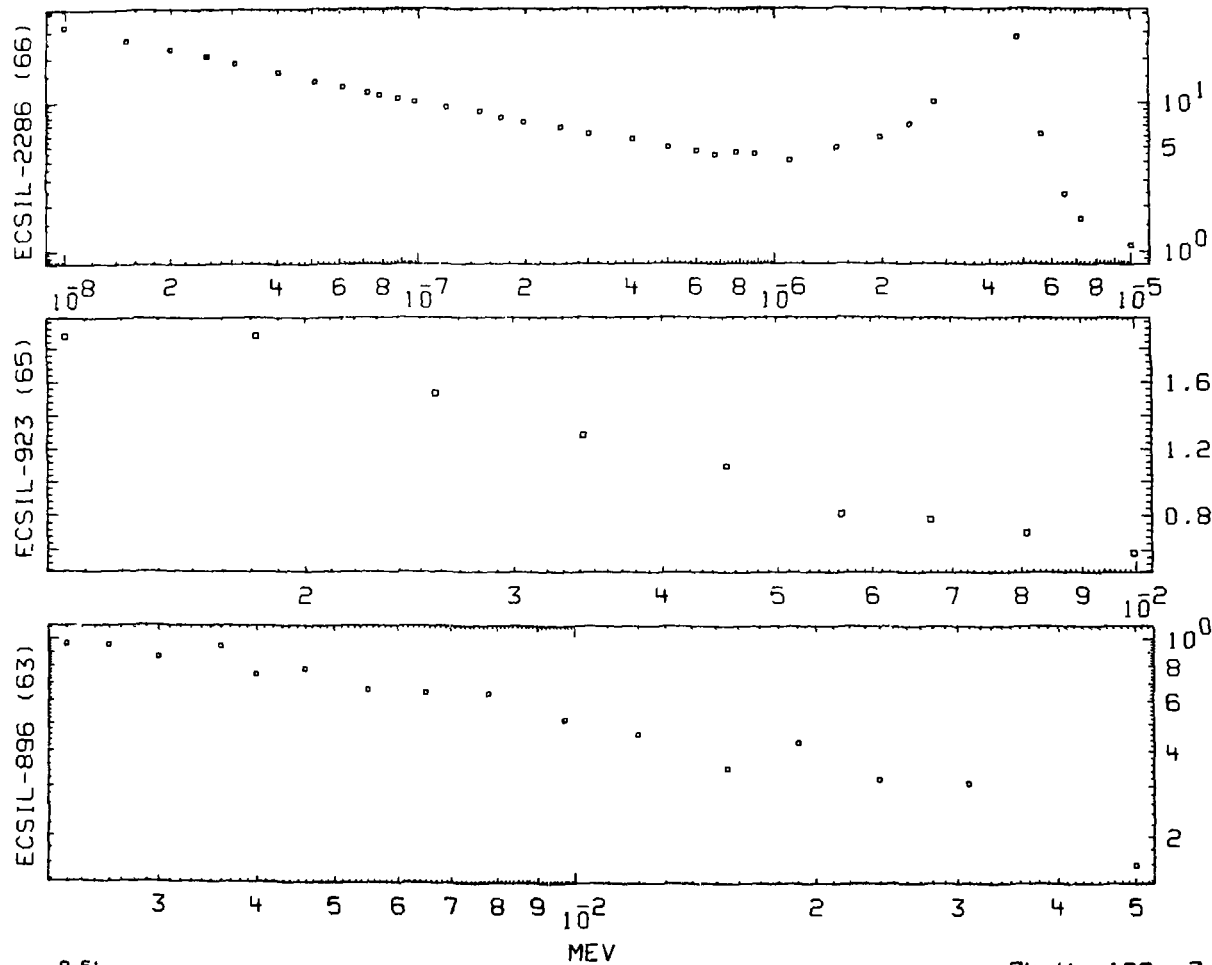
9-60

74-W -182 -2

03/01/74

N, GAMMA
CROSS SECTION

74-W -182



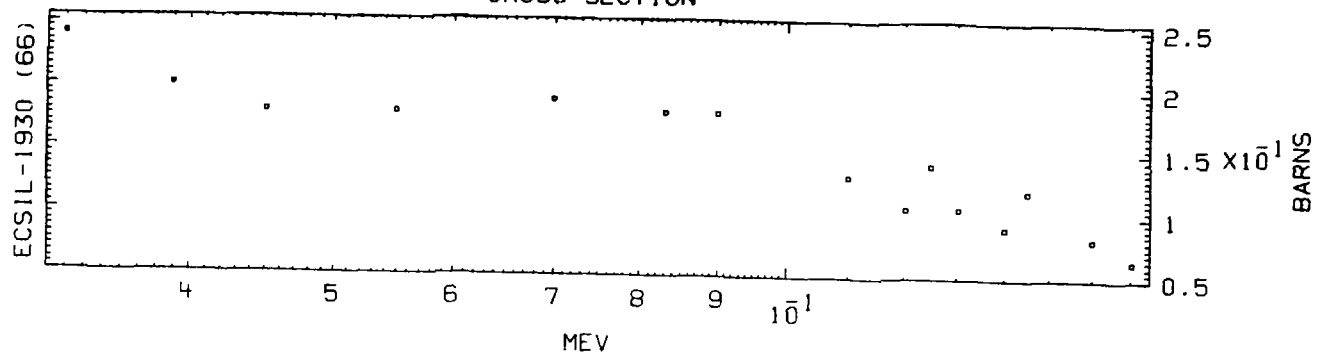
9-61

74-W -182 -3

03/01/74

N, GAMMA
CROSS SECTION

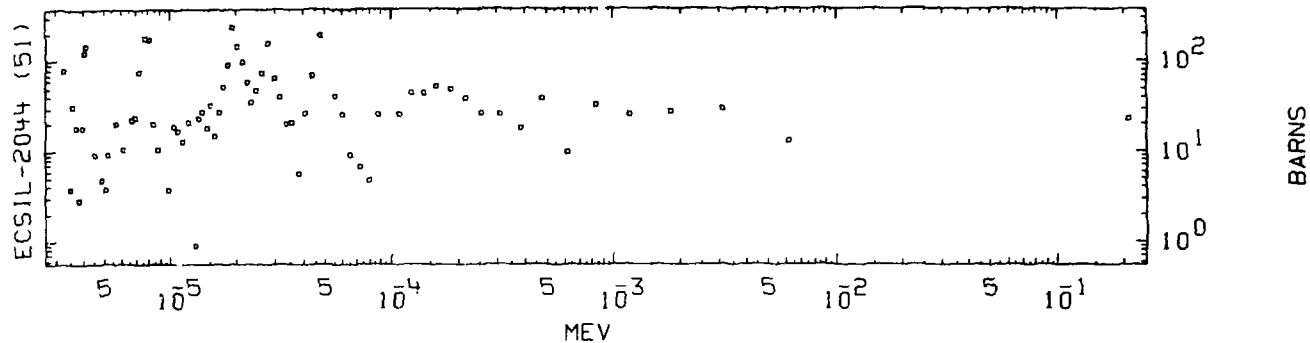
74-W -182



03/01/74

TOTAL
CROSS SECTION

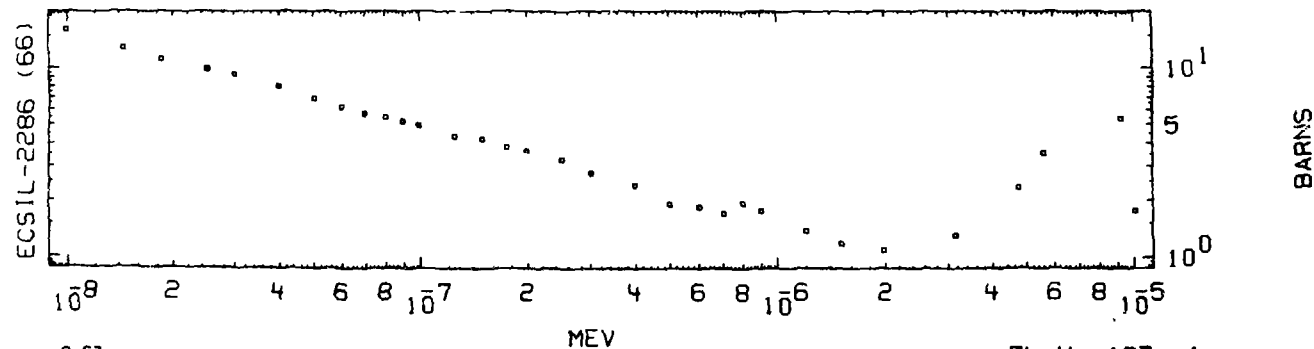
74-W -183



03/01/74

N,GAMMA
CROSS SECTION

74-W -183



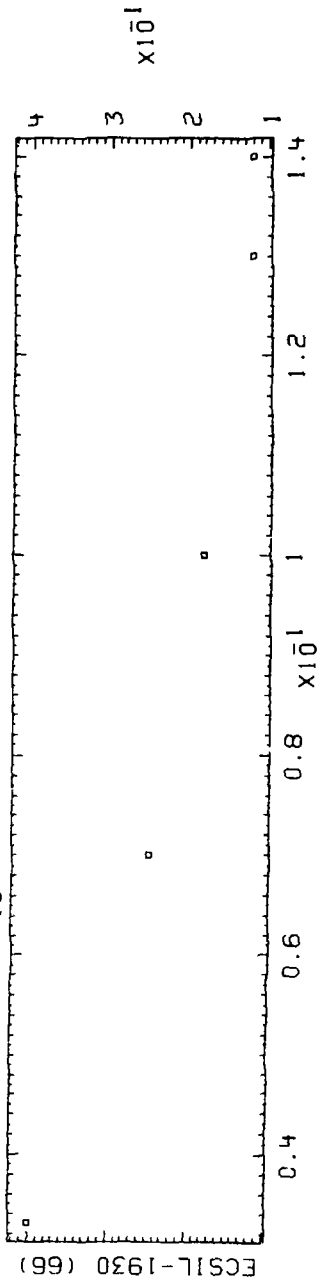
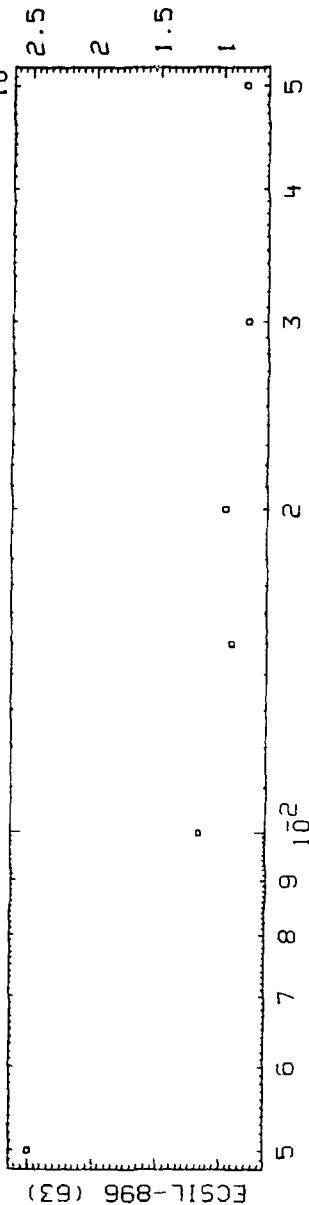
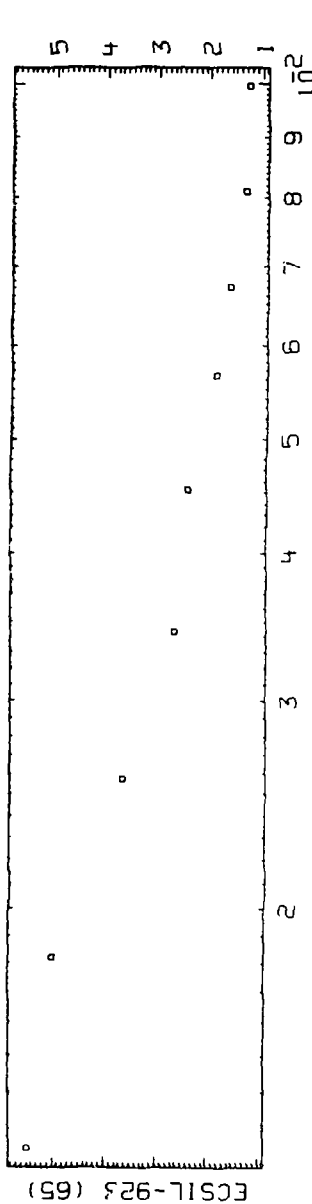
9-63

74-W -183 -1

03/01/74

N, GAMMA
CROSS SECTION

74-W -183



9-64

MEV

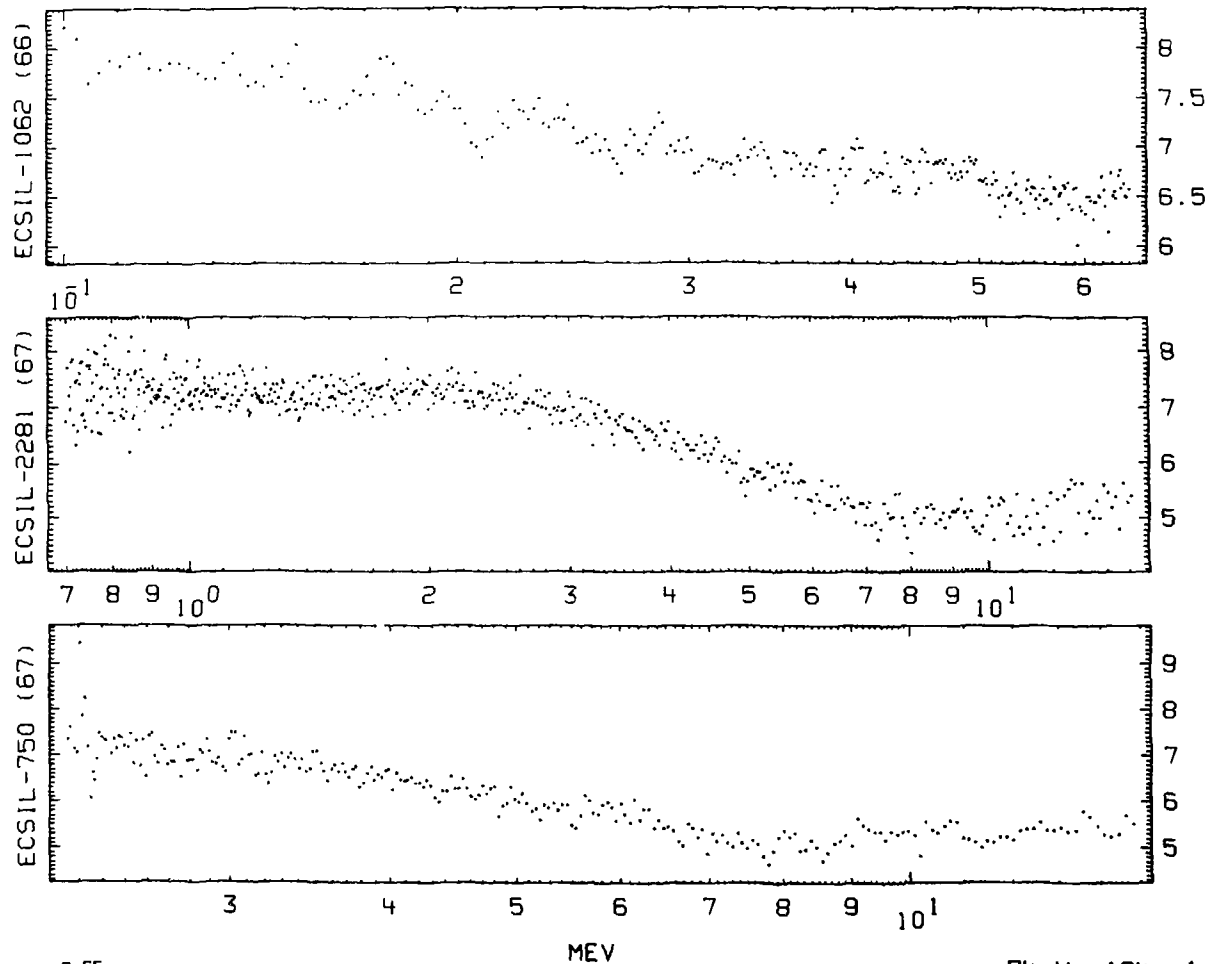
74-W -183 -2

BARNs

03/01/74

TOTAL
CROSS SECTION

74-W -184



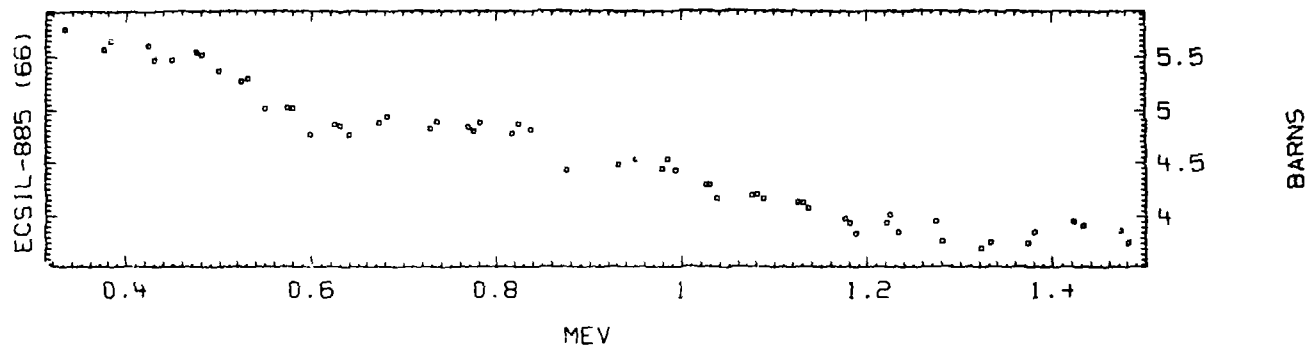
9-65

74-W -184 -1

03/01/74

ELASTIC
CROSS SECTION

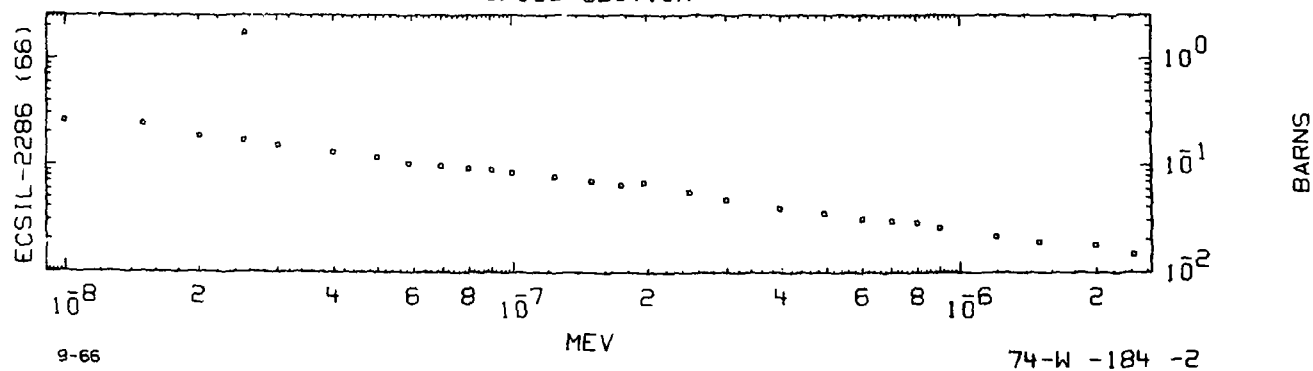
74-W -184



03/01/74

N, GAMMA
CROSS SECTION

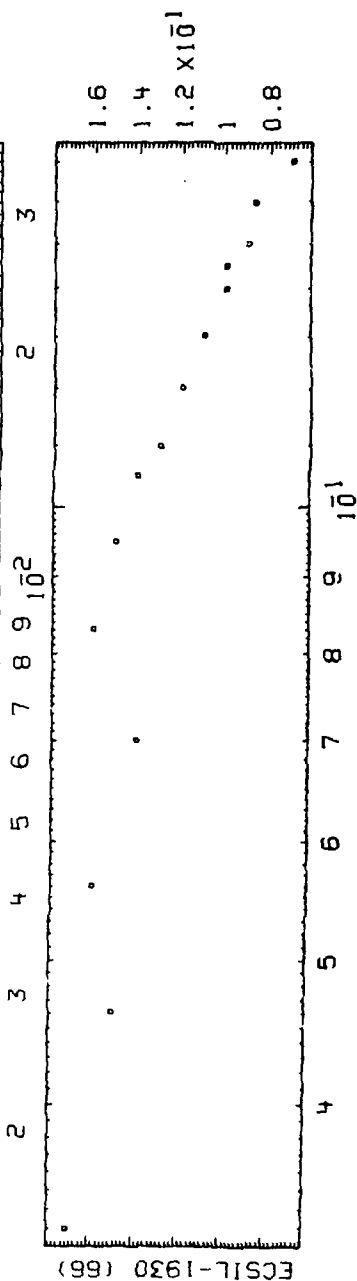
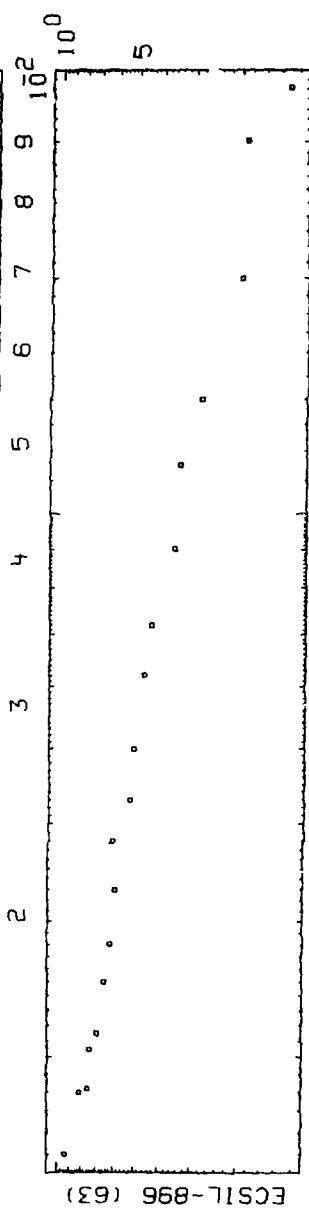
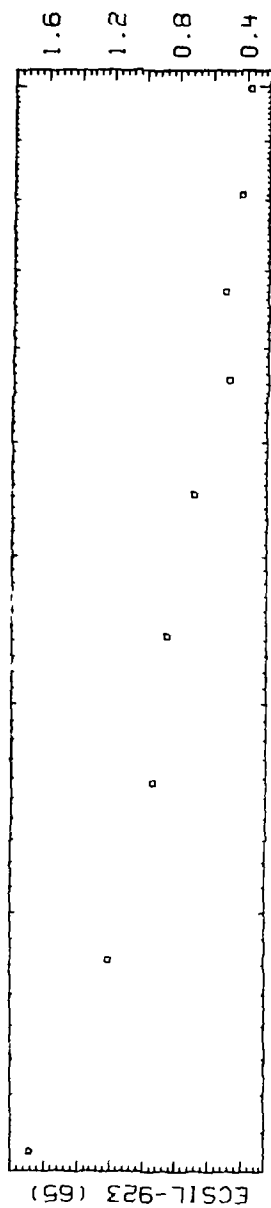
74-W -184



03/01/74

N, GAMMA CROSS SECTION

74-W -184



MEV

9-67

74-W -184 -3

BARNs

03/01/74

N, GAMMA CROSS SECTION

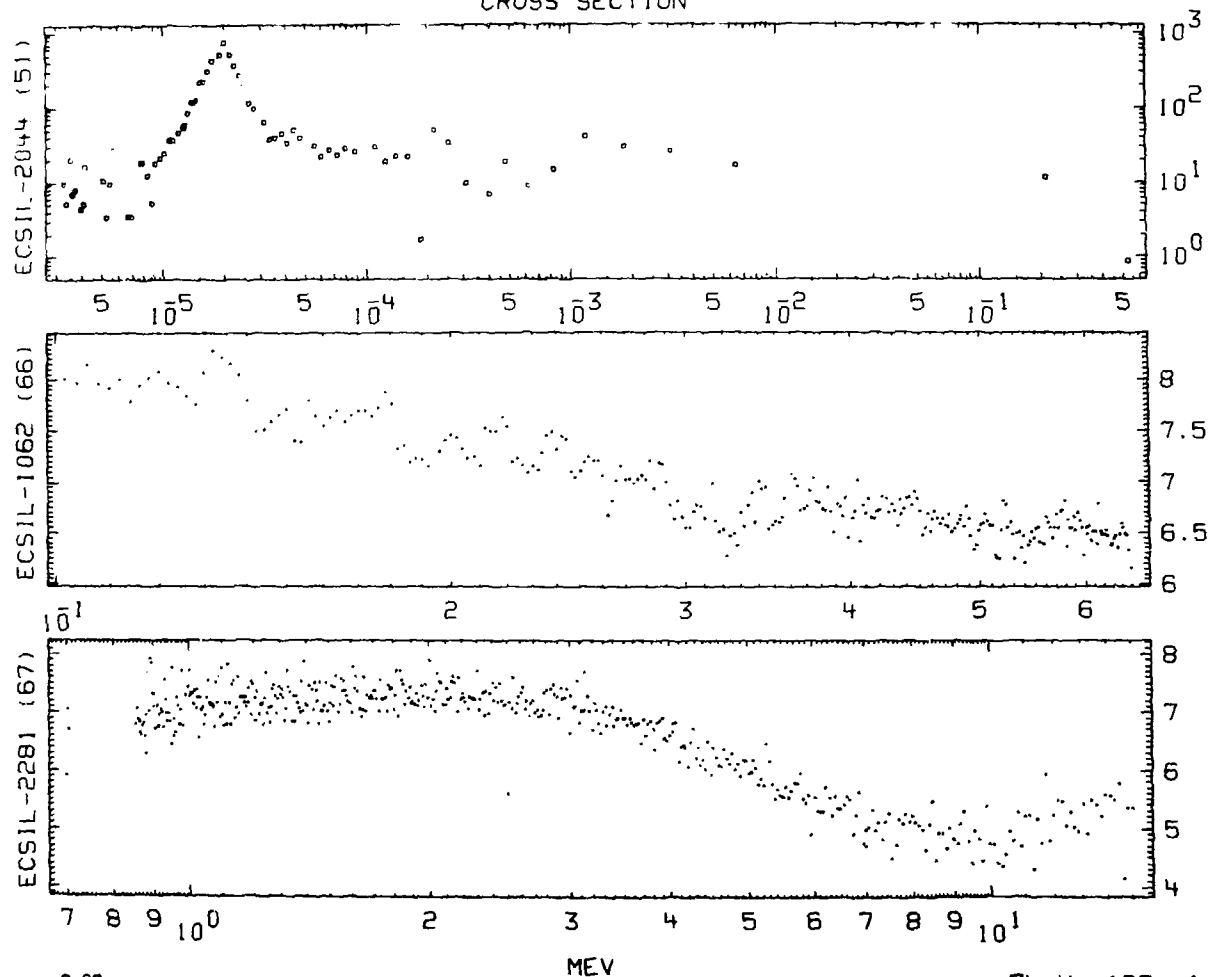
74-W -184

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE DAYS
5- 23	2.1000- 2	4.0000- 3	3.4000- 1	1.8000- 1	7.4010+ 1
4	2.5300- 8		2.1200+ 0	4.2400- 1	7.9000+ 1

03/01/74

TOTAL
CROSS SECTION

74-W -186



9-69

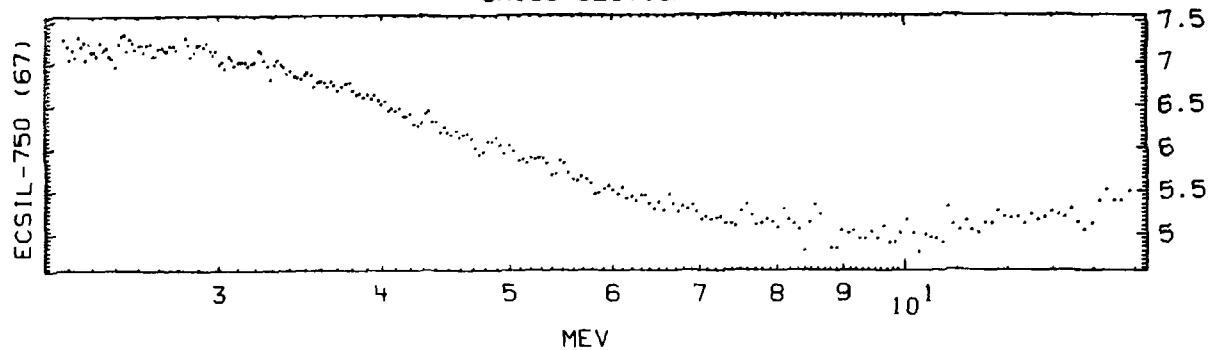
MEV

74-W -186 -1

03/01/74

TOTAL
CROSS SECTION

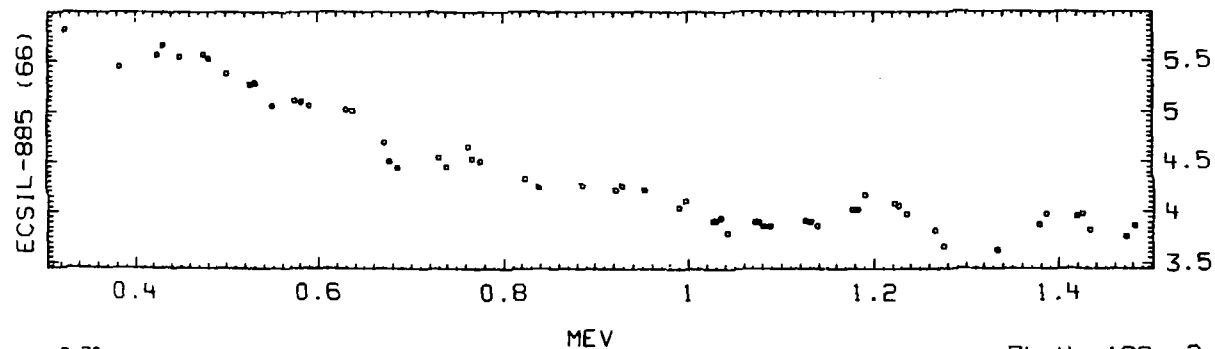
74-W -186



03/01/74

ELASTIC
CROSS SECTION

74-W -186



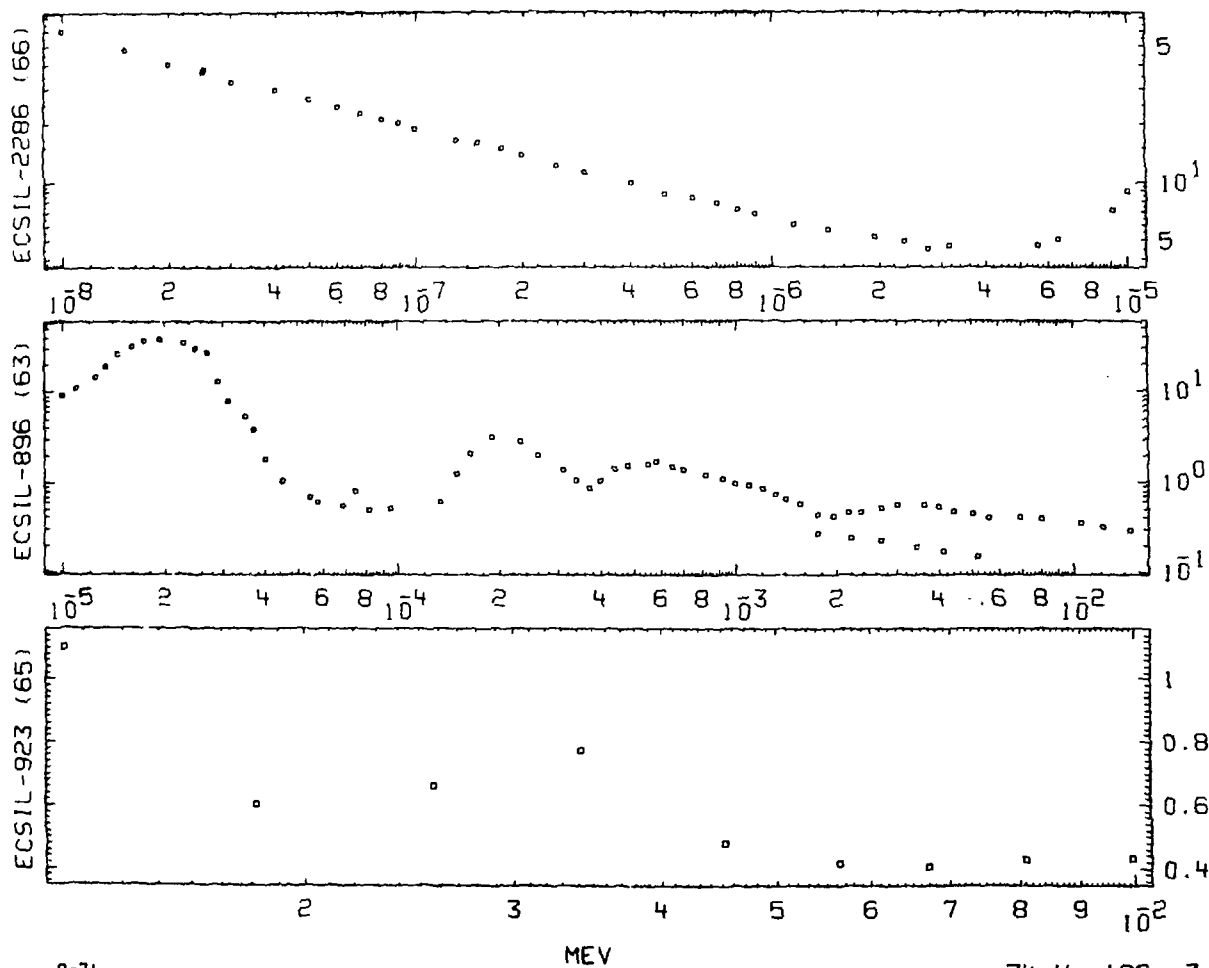
9-70

74-W -186 -2

03/01/74

N, GAMMA
CROSS SECTION

74-W -186



9-71

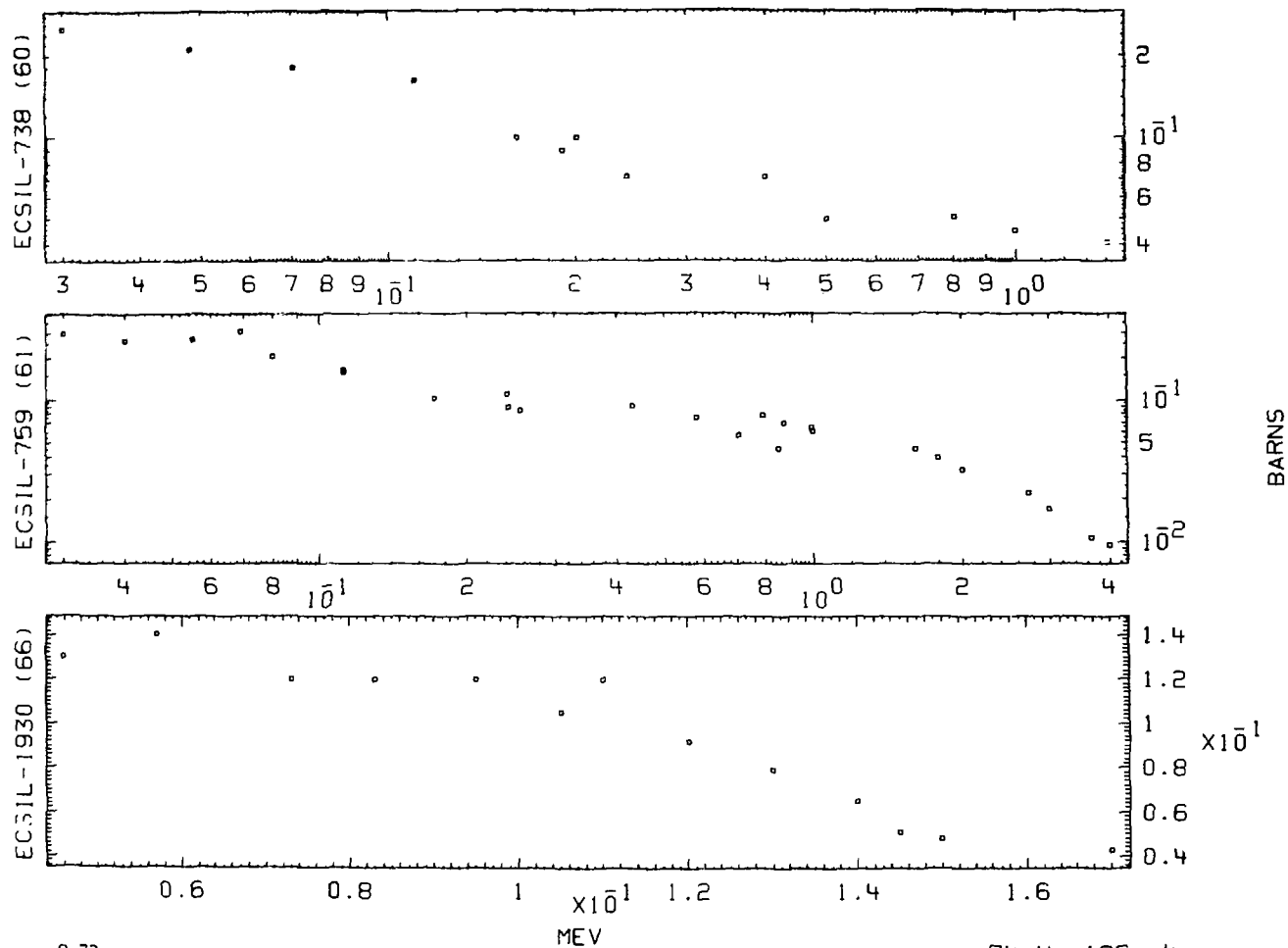
MEV

74-W -186 -3

03/01/74

N, GAMMA
CROSS SECTION

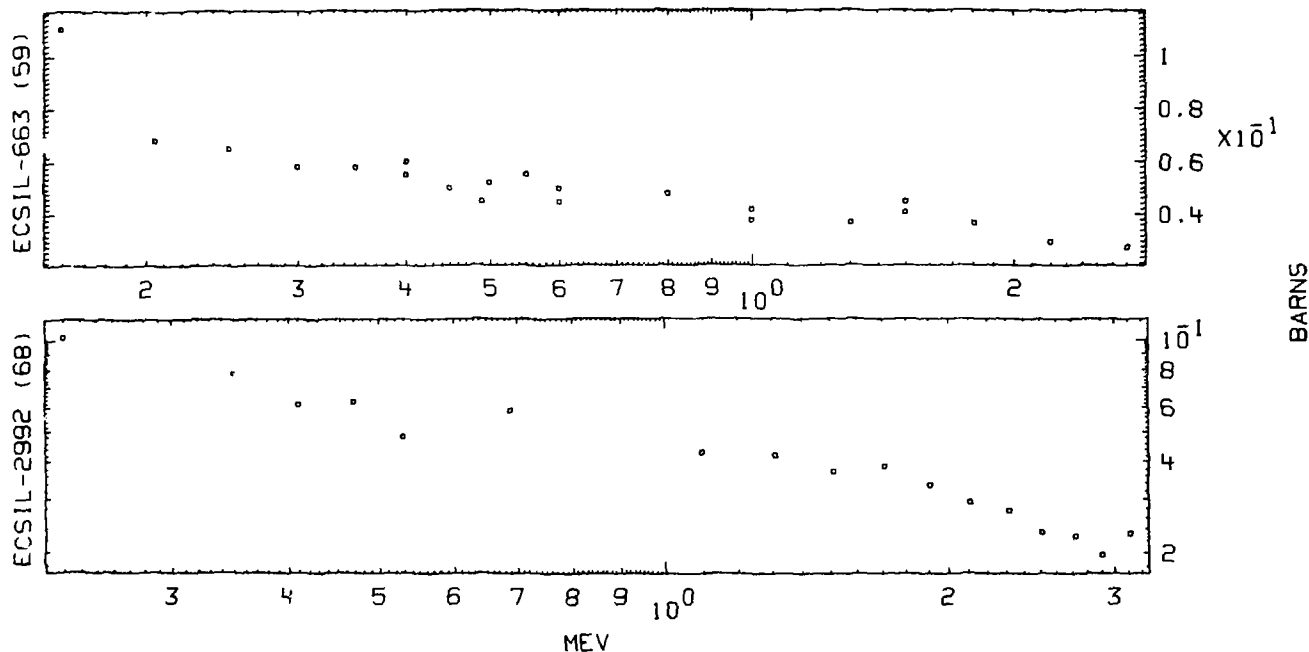
74-W -186



03/01/74

N, GAMMA
CROSS SECTION

74-W -186



03/01/74

N, GAMMA

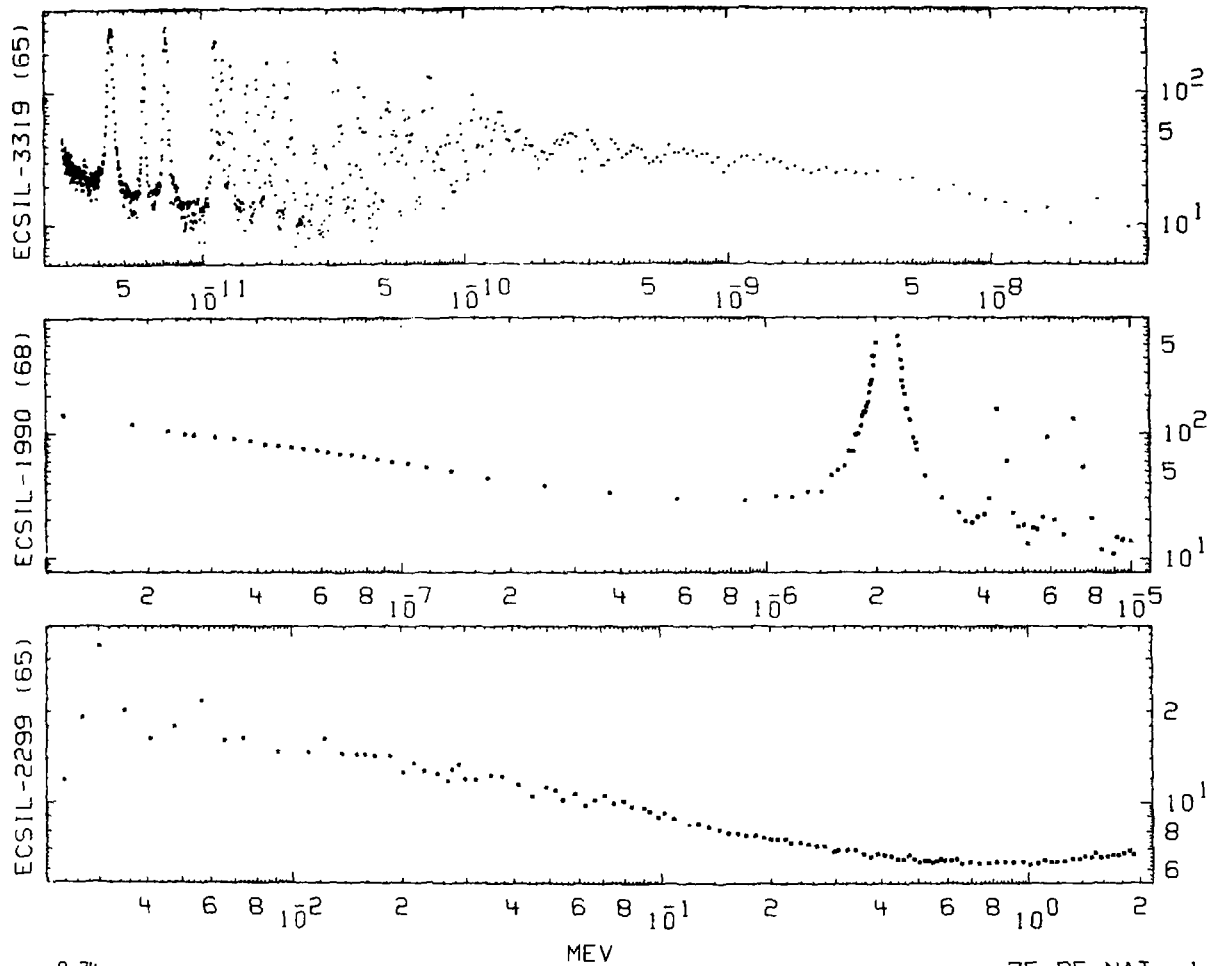
74-W -186

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
47	888 2.5300- 8		3.4200+ 1	6.8400+ 0	58	363 2.0000- 1	1.5000- 2	1.8000- 1	1.3000- 2
58	43 2.1000- 2	4.0000- 3	2.7700- 1	5.8010- 2	58	1044 2.5000+ 0		3.0000- 2	
57	23 2.1000- 2	4.0000- 3	2.6000- 1	7.0010- 2	68	2345 3.0000+ 0	2.0000- 1	3.1100- 2	2.9000- 3
66	1788 2.4000- 2		1.5500- 1	2.0000- 2	58	1044 3.0000+ 0		1.9000- 2	
57	305 2.4000- 2	5.0000- 3	2.9600- 1	4.4000- 2	58	1044 3.1000+ 0		2.4000- 2	
59	526 1.9560- 1	1.5000- 2	1.0000- 1	2.0000- 2	57	521 1.4500+ 1		4.0000- 3	1.0000- 3

03/01/74

TOTAL
CROSS SECTION

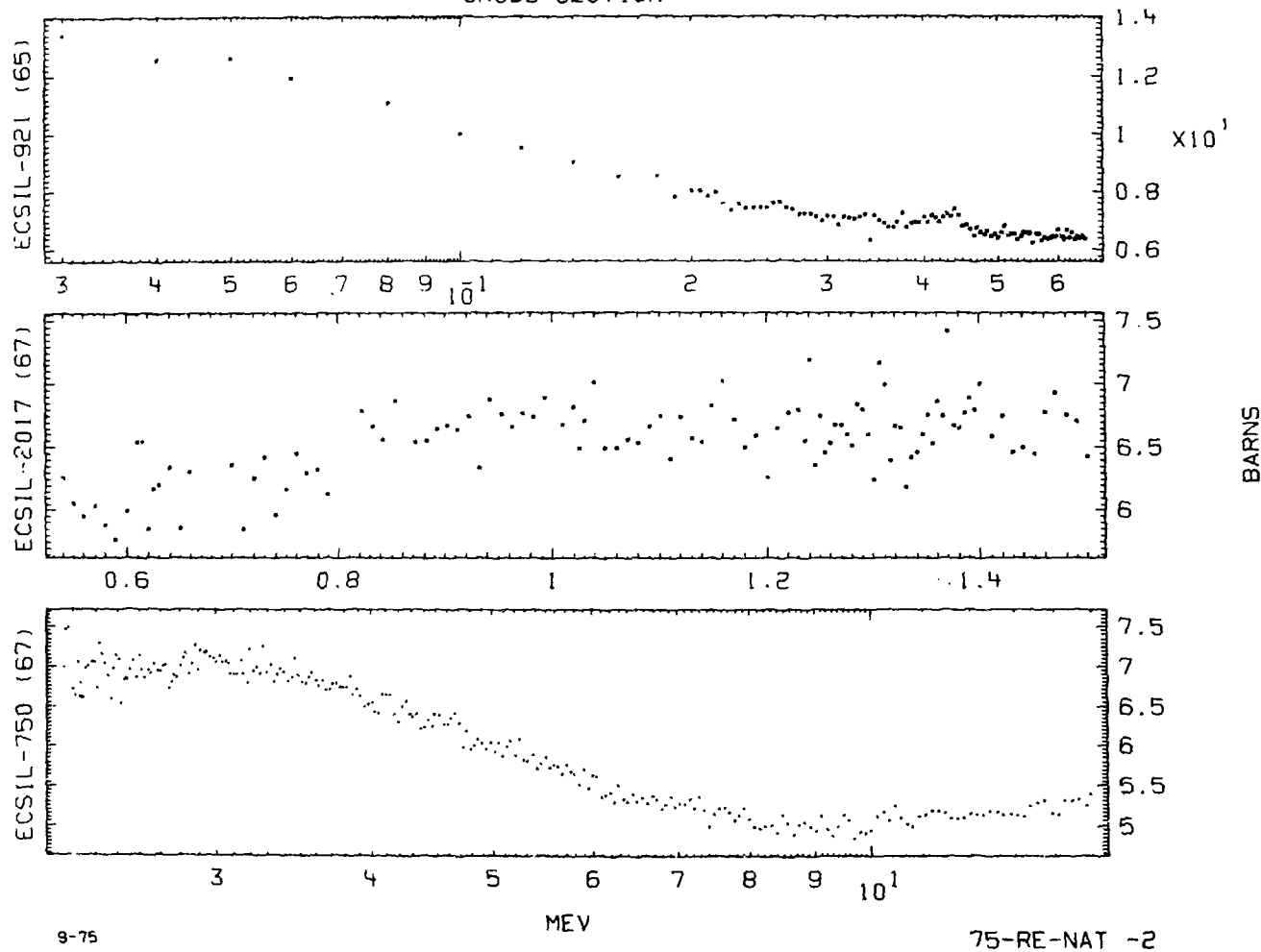
75-RE-NAT



03/01/74

TOTAL
CROSS SECTION

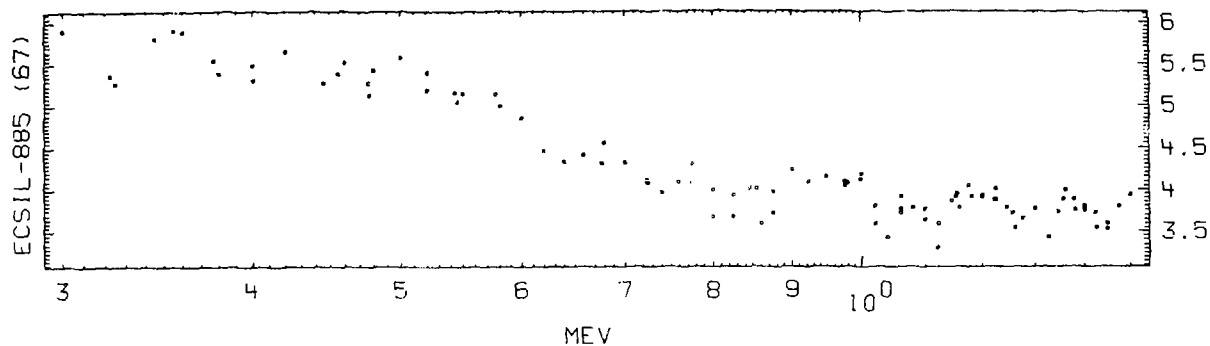
75-RE-NAT



03/01/74

ELASTIC
CROSS SECTION

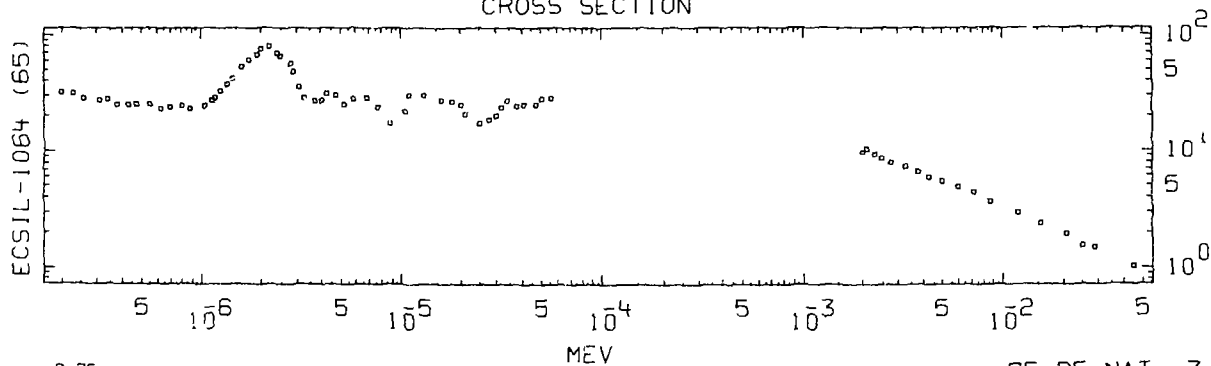
75-RE-NAT



03/01/74

N, GAMMA
CROSS SECTION

75-RE-NAT



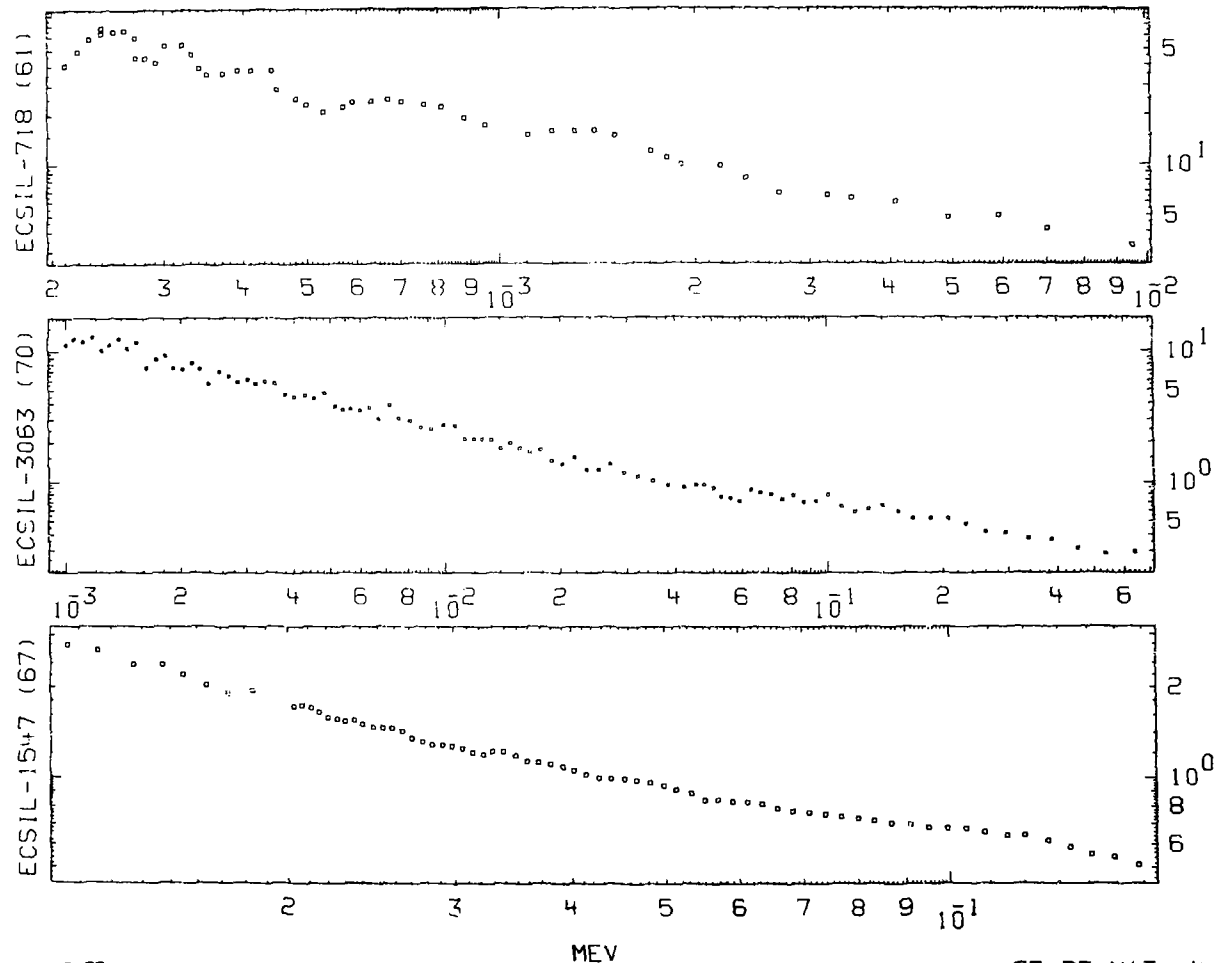
9-76

75-RE-NAT -3

03/01/74

N, GAMMA
CROSS SECTION

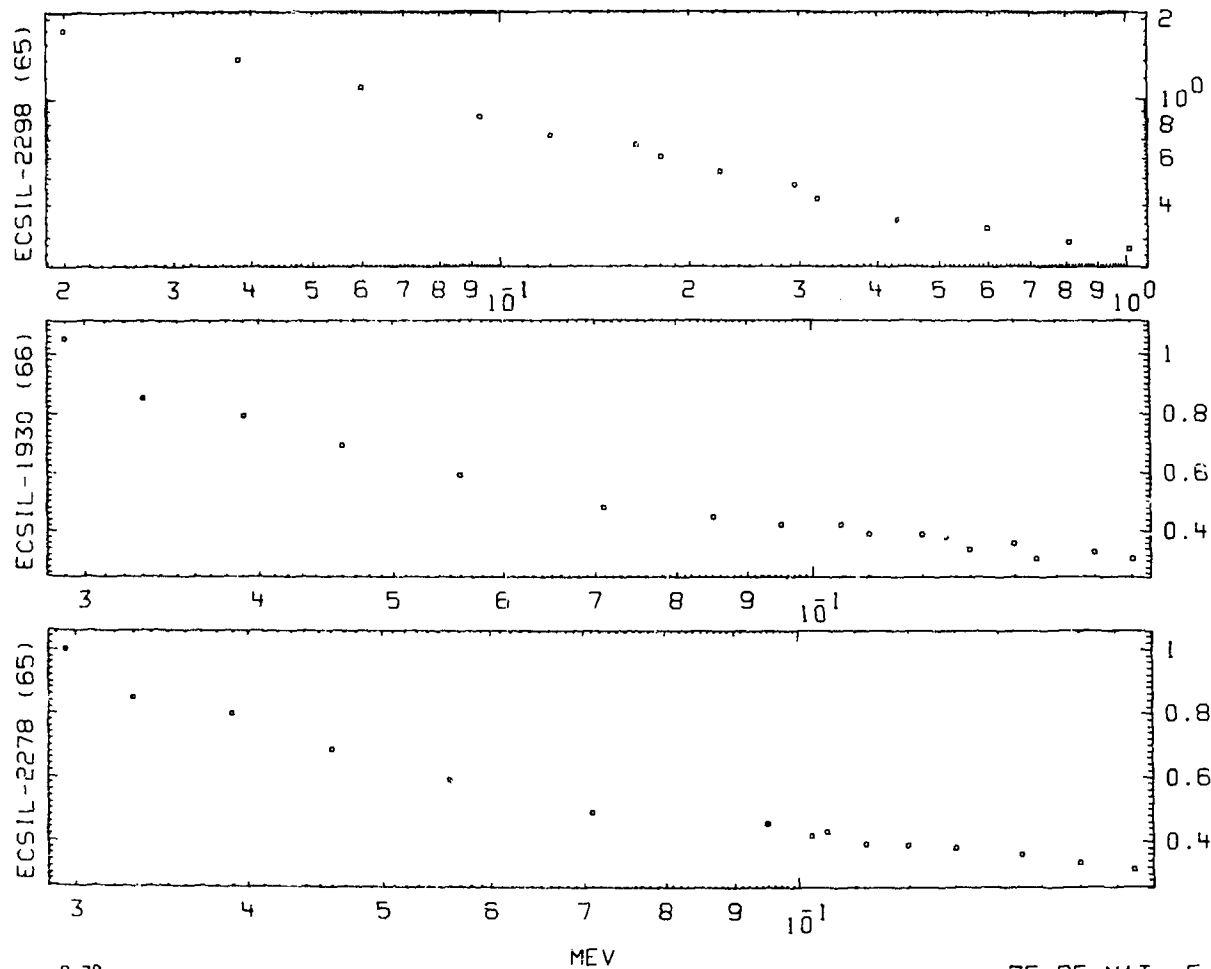
75-RE-NAT



03/01/74

N, GAMMA
CROSS SECTION

75-RE-NAT



9-78

75-RE-NAT -5

03/01/74

N, GAMMA
CROSS SECTION

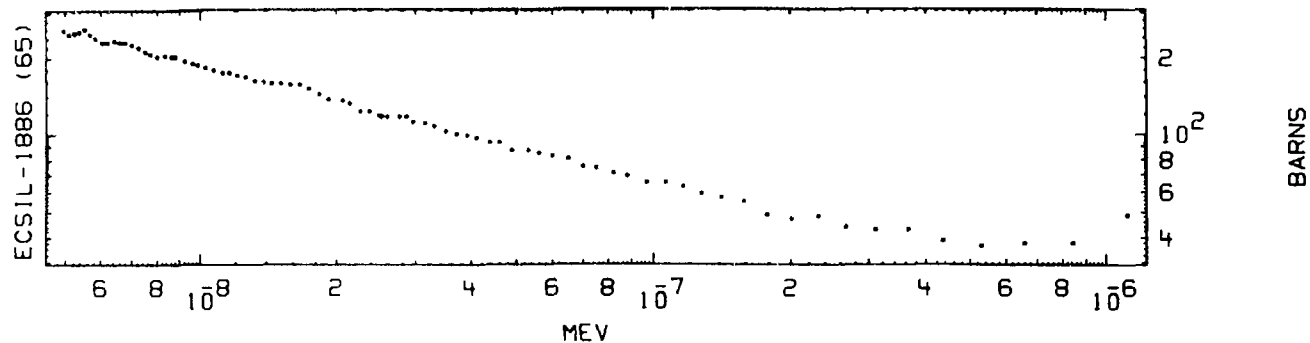
75-RE-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 1990	2.5300- 8		8.9000+ 1	5.0000+ 0
63 1	3.0000- 2	8.0010- 3	9.0010- 1	8.1010- 2
63 1	6.5000- 2	2.1000- 2	5.2510- 1	4.7000- 2

03/01/74

TOTAL
CROSS SECTION

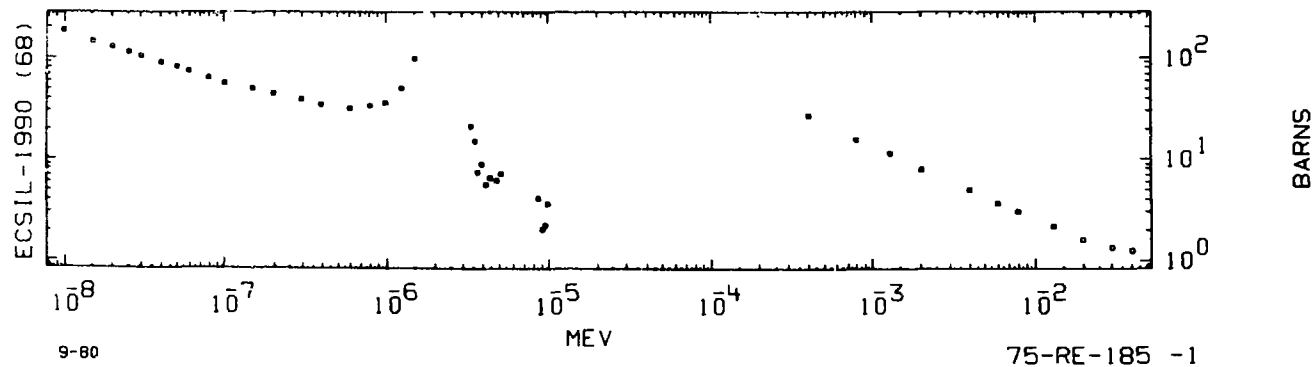
75-RE-185



03/01/74

N, GAMMA
CROSS SECTION

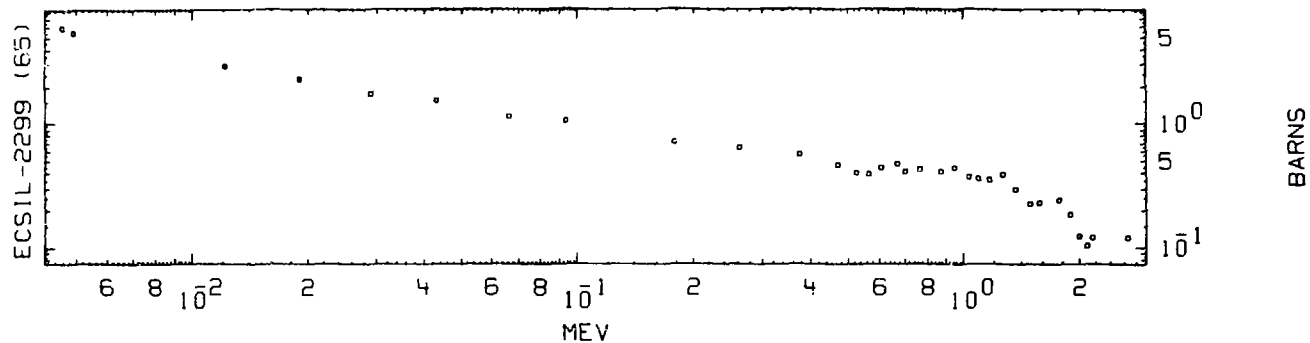
75-RE-185



03/01/74

N, GAMMA
CROSS SECTION

75-RE-185



03/01/74

N, GAMMA

75-RE-185

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63 2646	2.5300- 8		9.6500+ 1	1.0000+ 1
66 1788	2.4000- 2		1.7650+ 0	2.6500- 1
57 305	2.4000- 2	5.0000- 3	2.6500+ 0	5.0000- 1
43 309	2.4000- 1		1.2100+ 0	

03/01/74

N. GAMMA
CROSS SECTION

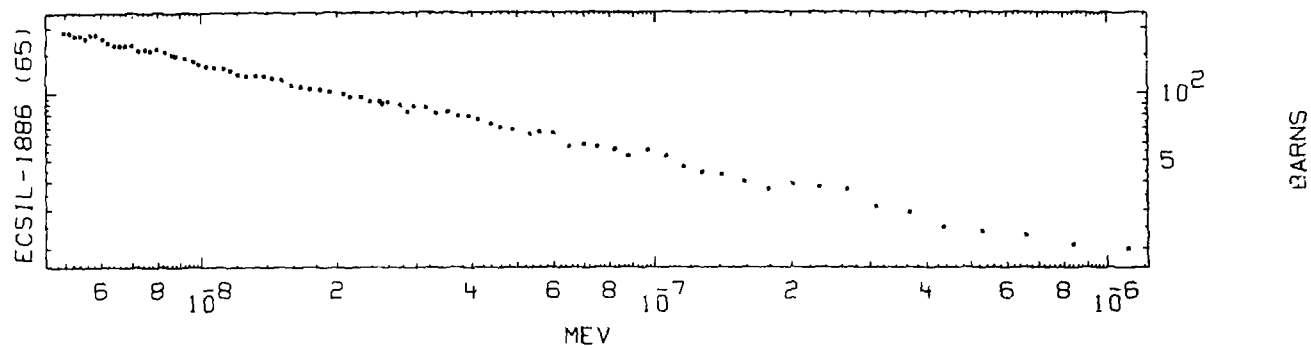
75-RE-186

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
47 888	2.5300- 8		1.0100+ 2	2.0200+ 1

03/01/74

TOTAL
CROSS SECTION

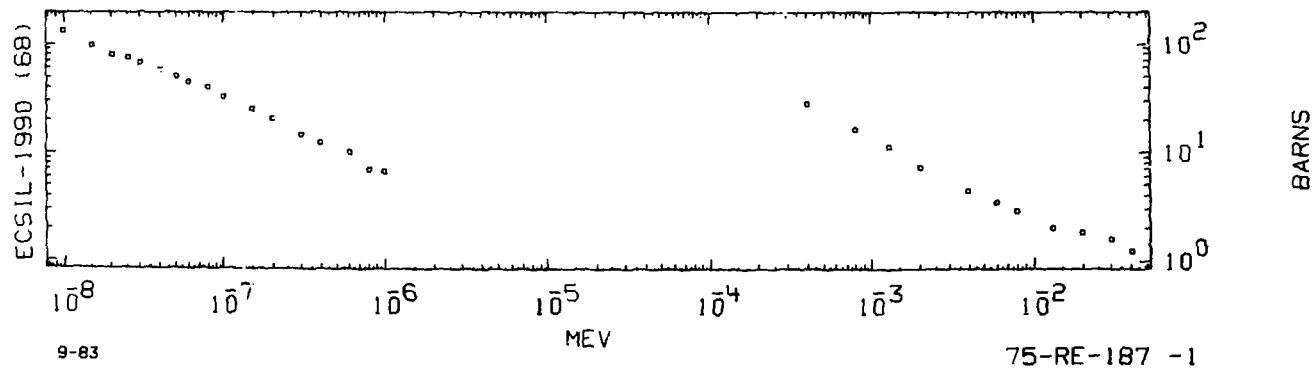
75-RE-187



03/01/74

N, GAMMA
CROSS SECTION

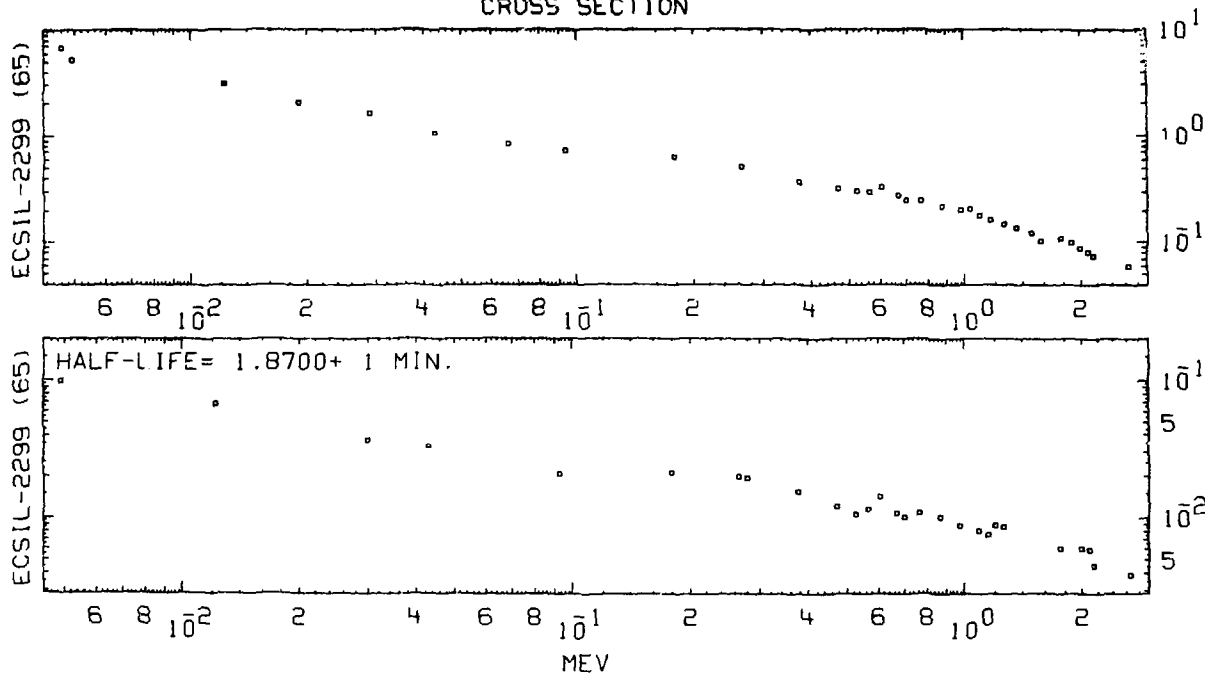
75-RE-187



03/01/74

N, GAMMA
CROSS SECTION

75-RE-187



03/01/74

N, GAMMA

75-RE-187

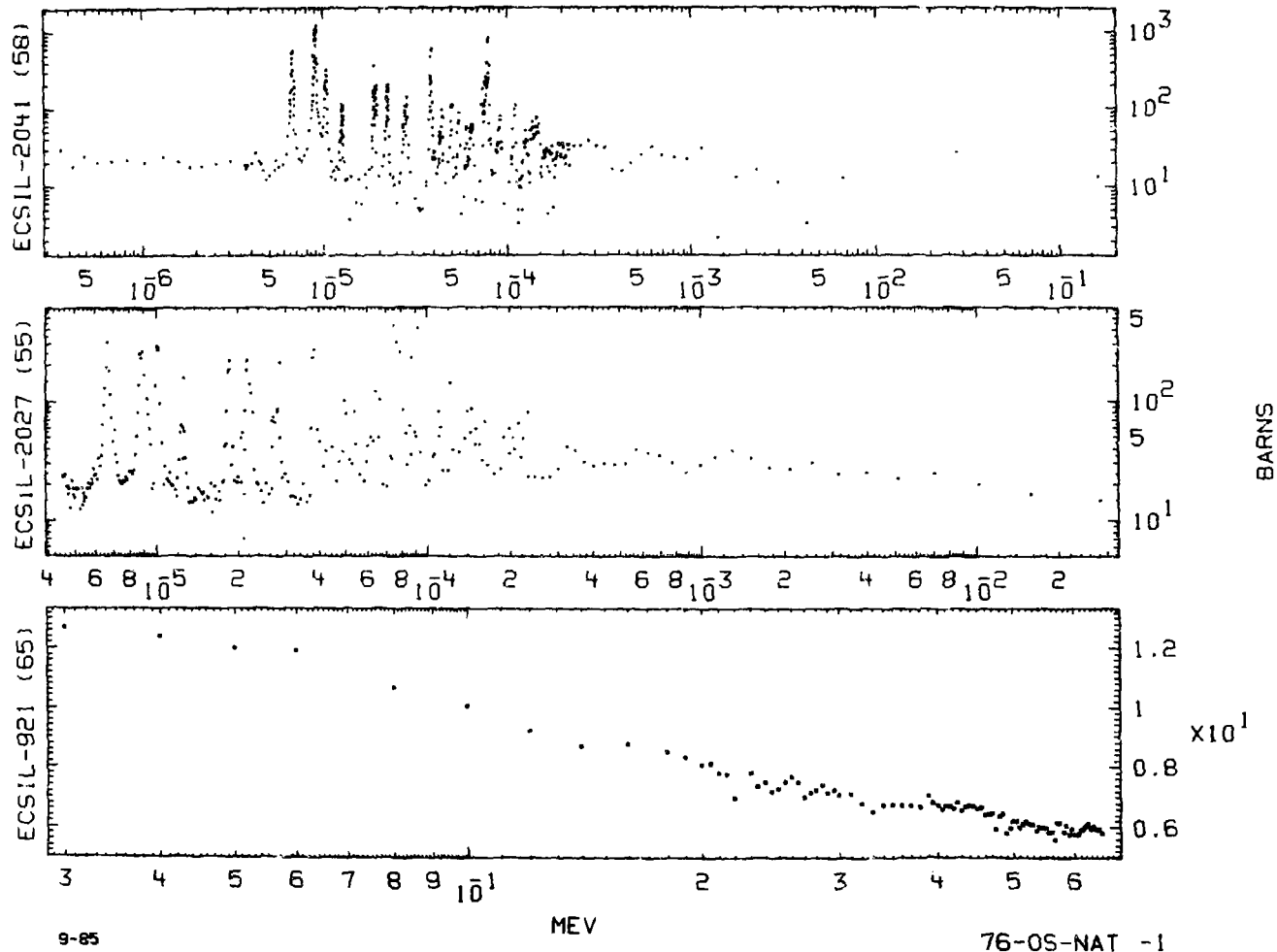
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63 2646	2.5300- 8		8.8000+ 1	1.4000+ 1	57 305	2.4000- 2	5.0000- 3	9.7010- 1	2.0090- 1

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE HOURS
66 1788	2.4000- 2		8.7500- 1	8.0000- 2	1.7000+ 1
47 888	2.5300- 8		7.5300+ 1	1.5060+ 1	1.8000+ 1

03/01/74

TOTAL
CROSS SECTION

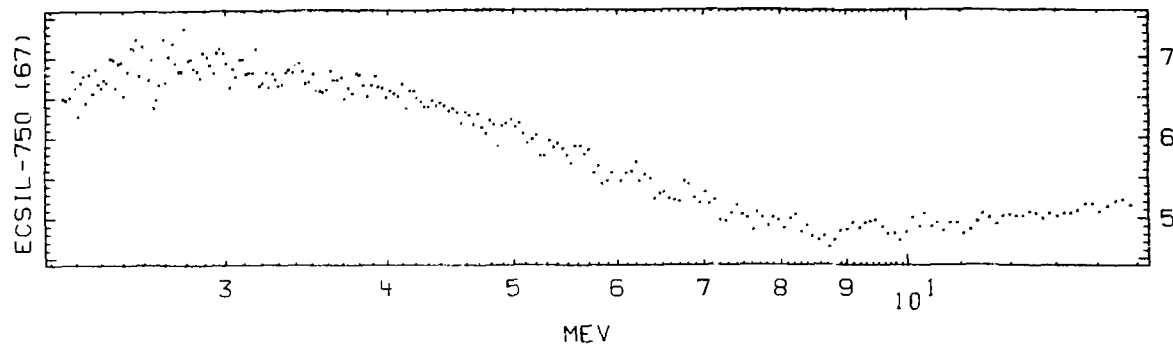
76-OS-NAT



03/01/74

TOTAL
CROSS SECTION

76-OS-NAT

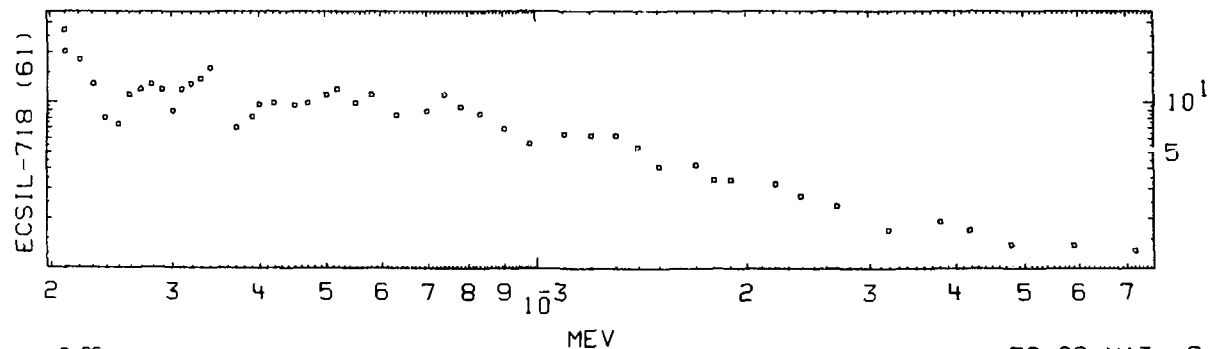


BARNs

03/01/74

N, GAMMA
CROSS SECTION

76-OS-NAT



BARNs

9-86

76-OS-NAT -2

03/01/74

TOTAL
CROSS SECTION

76-OS-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
47 45	1.0000- 3		1.7800+ 1	4.0000- 1
47 45	5.0000- 3		1.5600+ 1	4.0000- 1
47 45	1.0000- 2		1.3000+ 1	1.0000+ 0

03/01/74

N, GAMMA

76-OS-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63 1	3.0000- 2	8.0010- 3	3.0000- 1	2.7000- 2
63 1	6.5000- 2	2.1000- 2	1.7500- 1	1.6000- 2

03/01/74

N, GAMMA
CROSS SECTION

76-OS-190

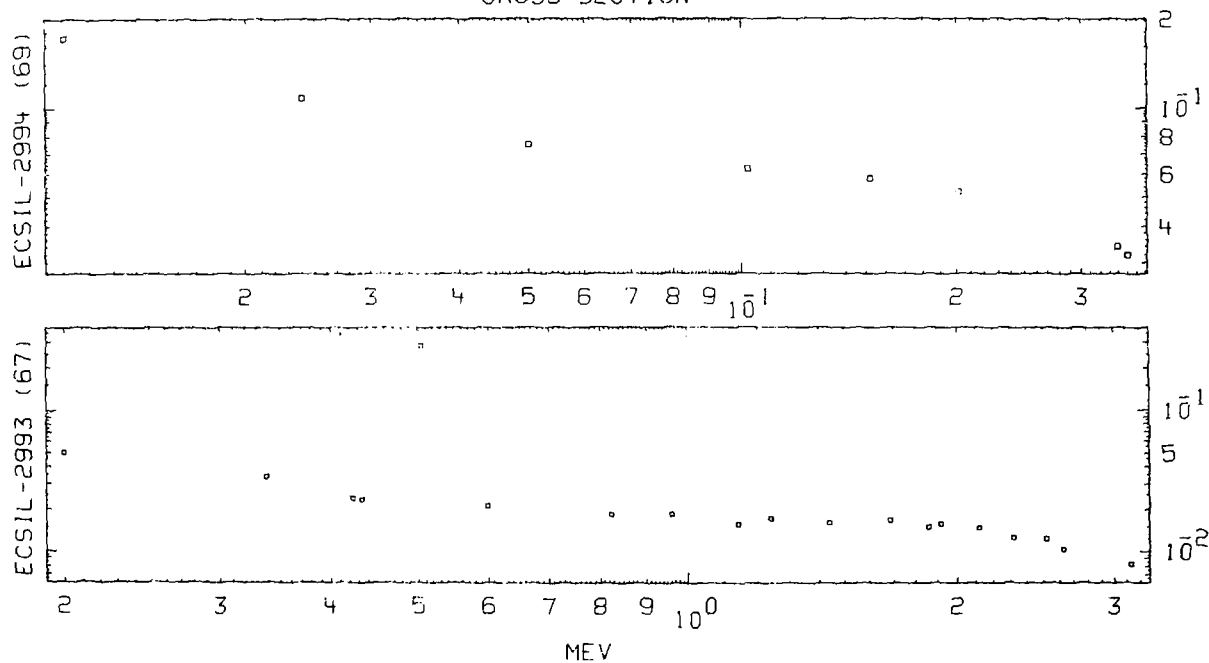
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
59	526 1.9500- 1	1.5000- 2	2.0000- 1	3.0000- 2

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE DAYS
57	305 2.4000- 2	5.0000- 3	8.8610- 1	1.3000- 1	1.5000+ 1

03/01/74

N, GAMMA
CROSS SECTION

76-05-192



03/01/74

N, GAMMA

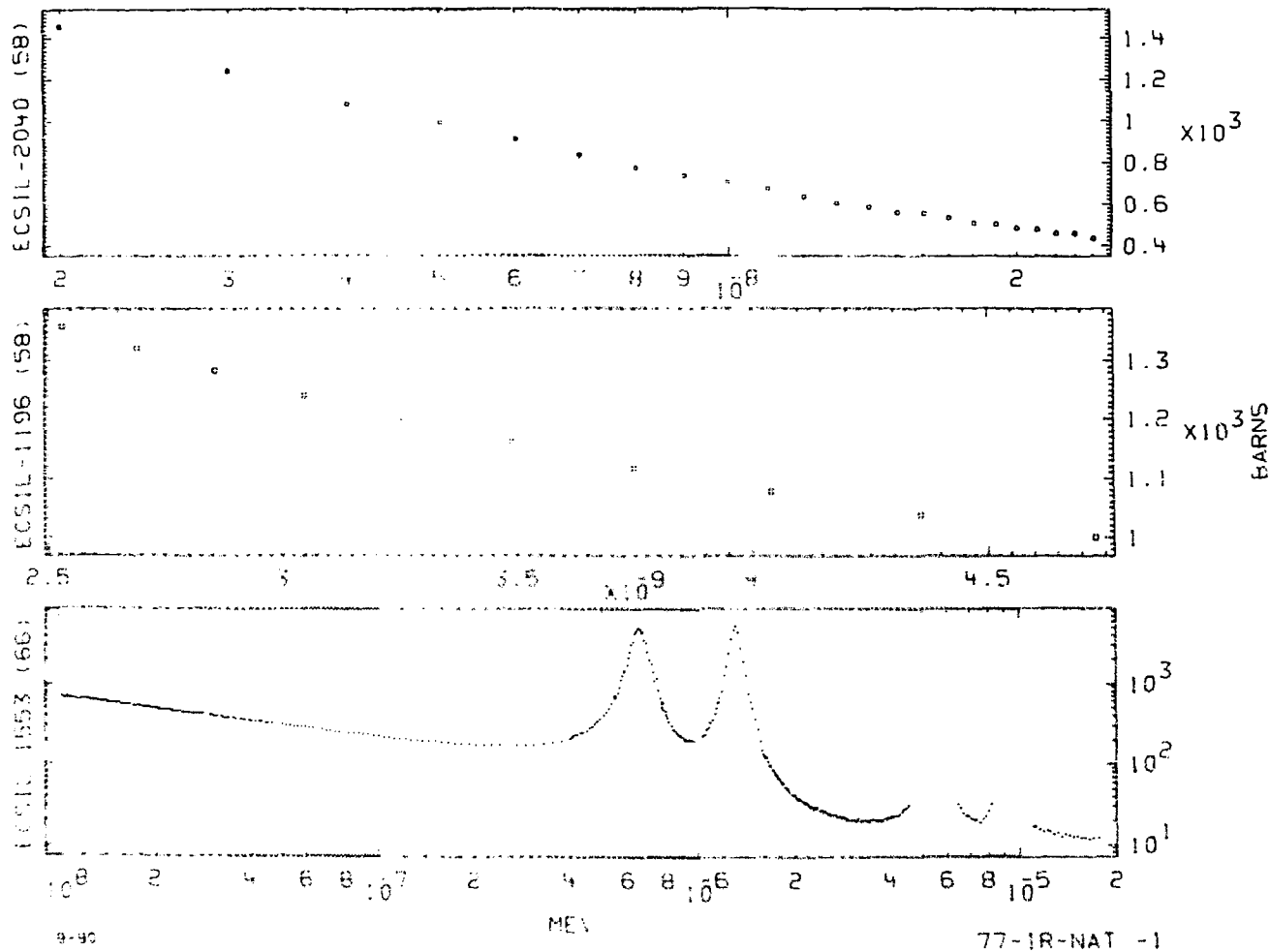
76-05-192

REFERENCE	ENERGY MEV	DELTA MEV	X SEC BARN	DELTA BARN
67 199:	3.0000+ 0	2.0000- 1	3.0000- 2	1.0000- 2

03/01/74

TOTAL
CROSS SECTION

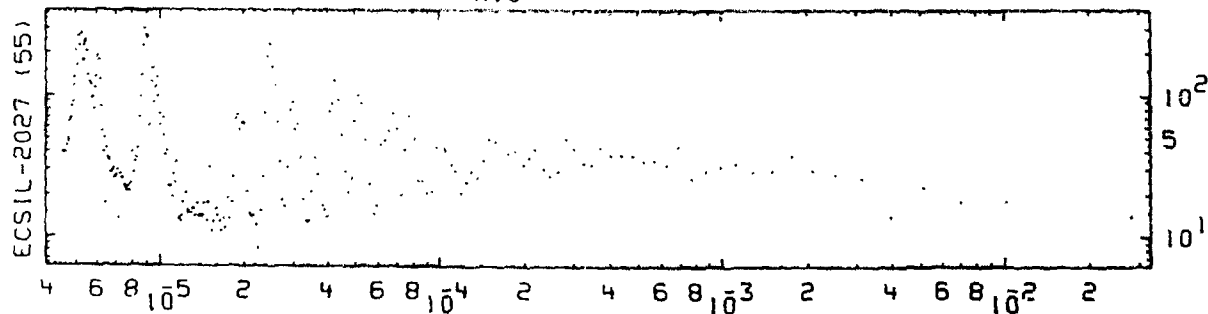
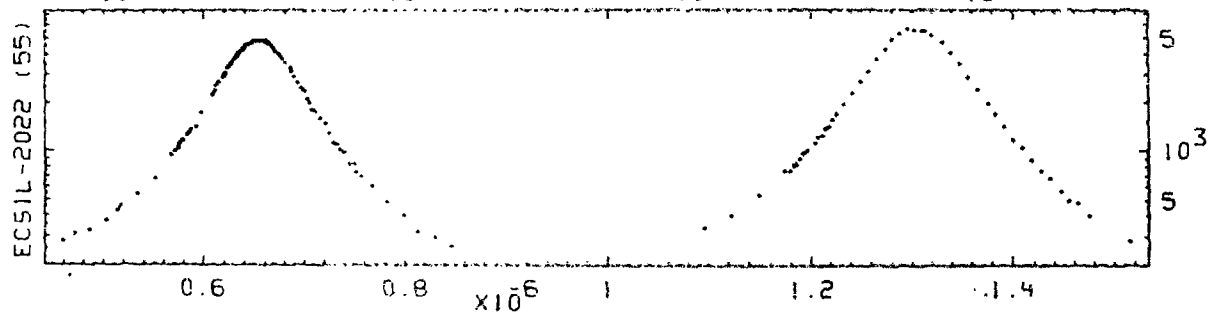
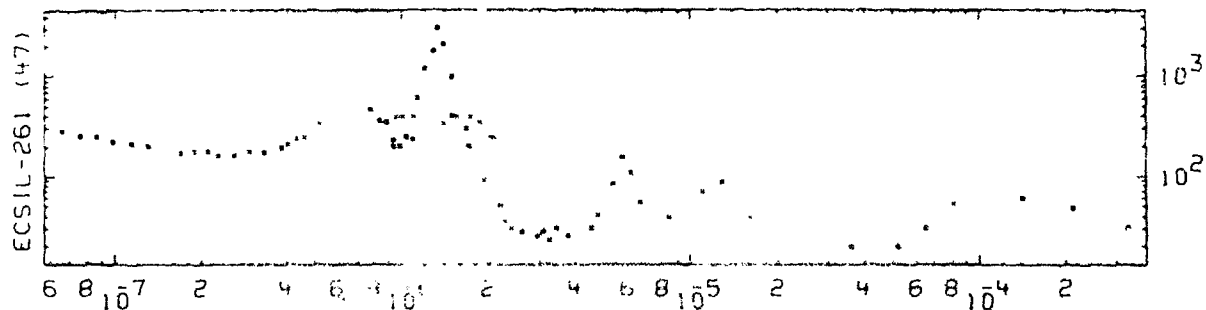
77-IR-NAT



03/01/74

TOTAL
CROSS SECTION

77-IR-NAT

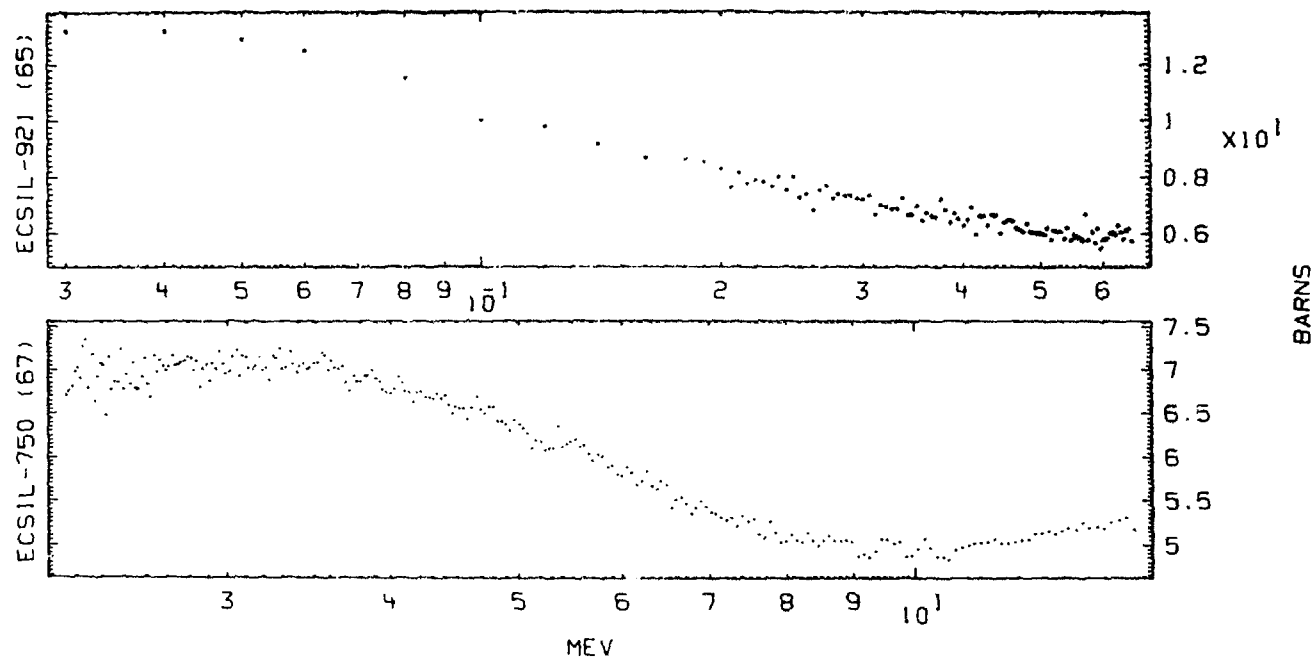


BARNs

03/01/74

TOTAL
CROSS SECTION

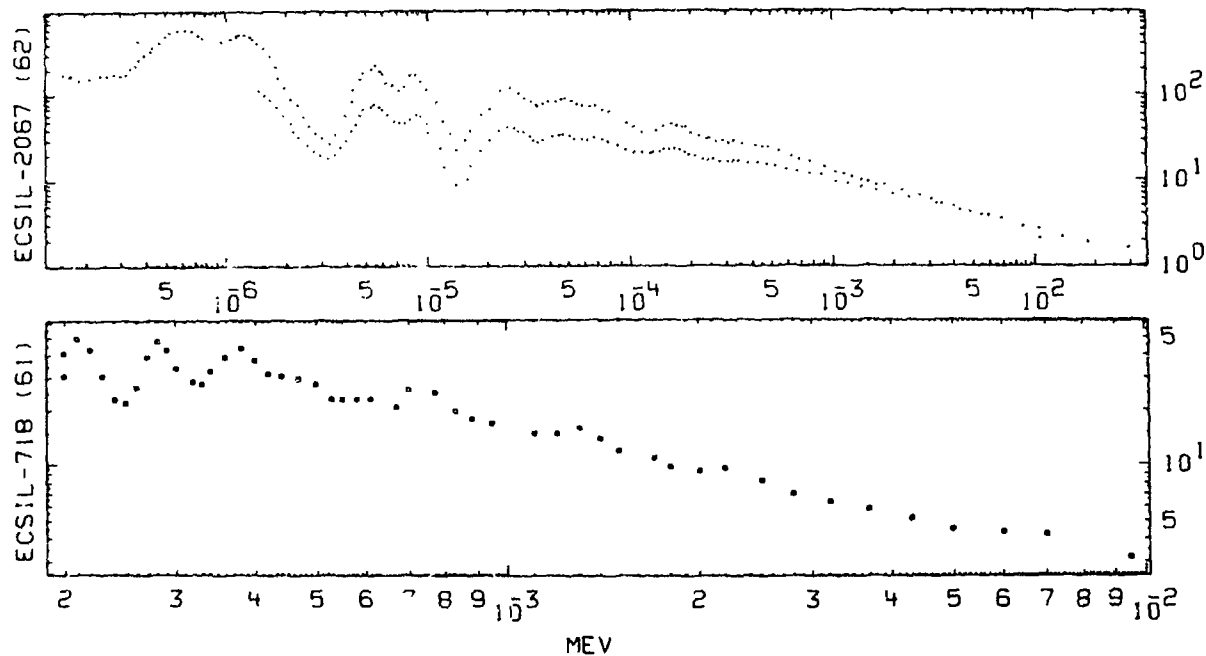
77-IR-NAT



03/01/74

N, GAMMA
CROSS SECTION

77-IR-NAT



03/01/74

N, GAMMA

77-IR-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63	1 3.0000- 2	8.0010- 3	7.9510- 1	7.2010- 2
63	1 6.5000- 2	2.1000- 2	4.5000- 1	4.1000- 2

03/01/74

TOTAL
CROSS SECTION

77-IR-191

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
59 2549	2.5300- 8		9.2400+ 2	5.3000+ 1

03/01/74

N, GAMMA

77-IR-191

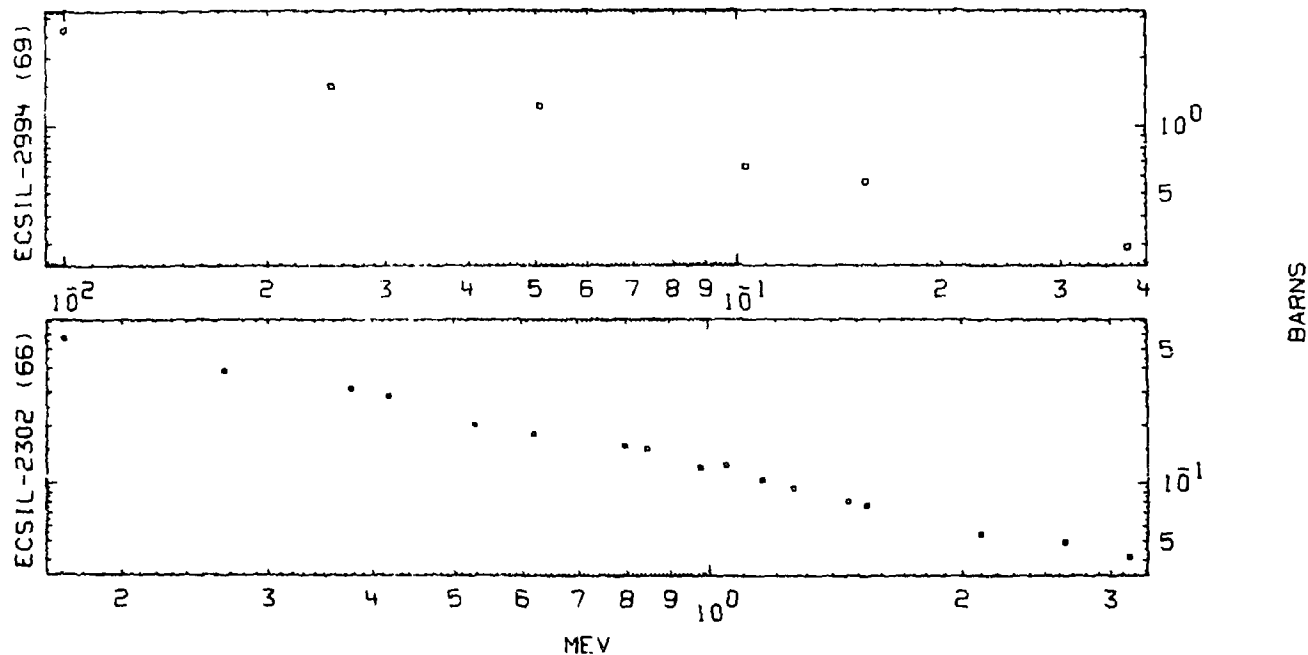
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE MINUTES
47 888	2.5300- 8		1.0000+ 3	2.0000+ 2	1.5000+ 0

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE DAYS
47 888	2.5300- 8		2.6000+ 2	1.0400+ 2	7.0000+ 1

03/01/74

N, GAMMA
CROSS SECTION

77-IR-193



03/01/74

TOTAL

77-IR-193

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
59 2549	2.5300- 8		1.1250+ 2	7.5000+ 0

03/01/74

N, GAMMA CROSS SECTION

77-IR-193

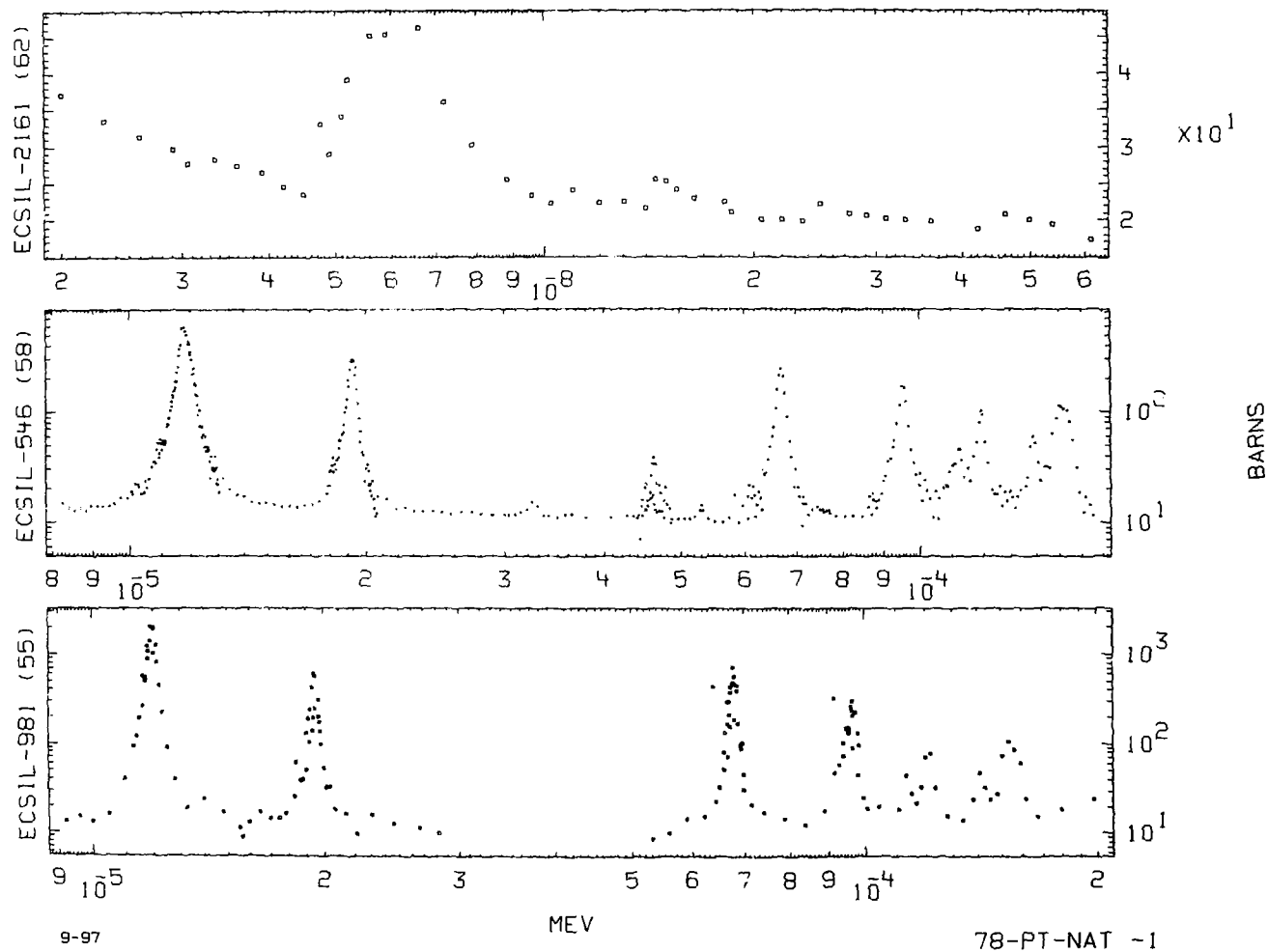
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
67 1991	3.0000+ 0	2.0000- 1	4.3500- 2	8.0000- 4

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE HOURS
66 1788	2.4000- 2		6.3000- 1	5.0000- 2	1.9000+ 1
47 888	2.5300- 8		1.2800+ 2	2.5600+ 1	2.0700+ 1

03/01/74

TOTAL
CROSS SECTION

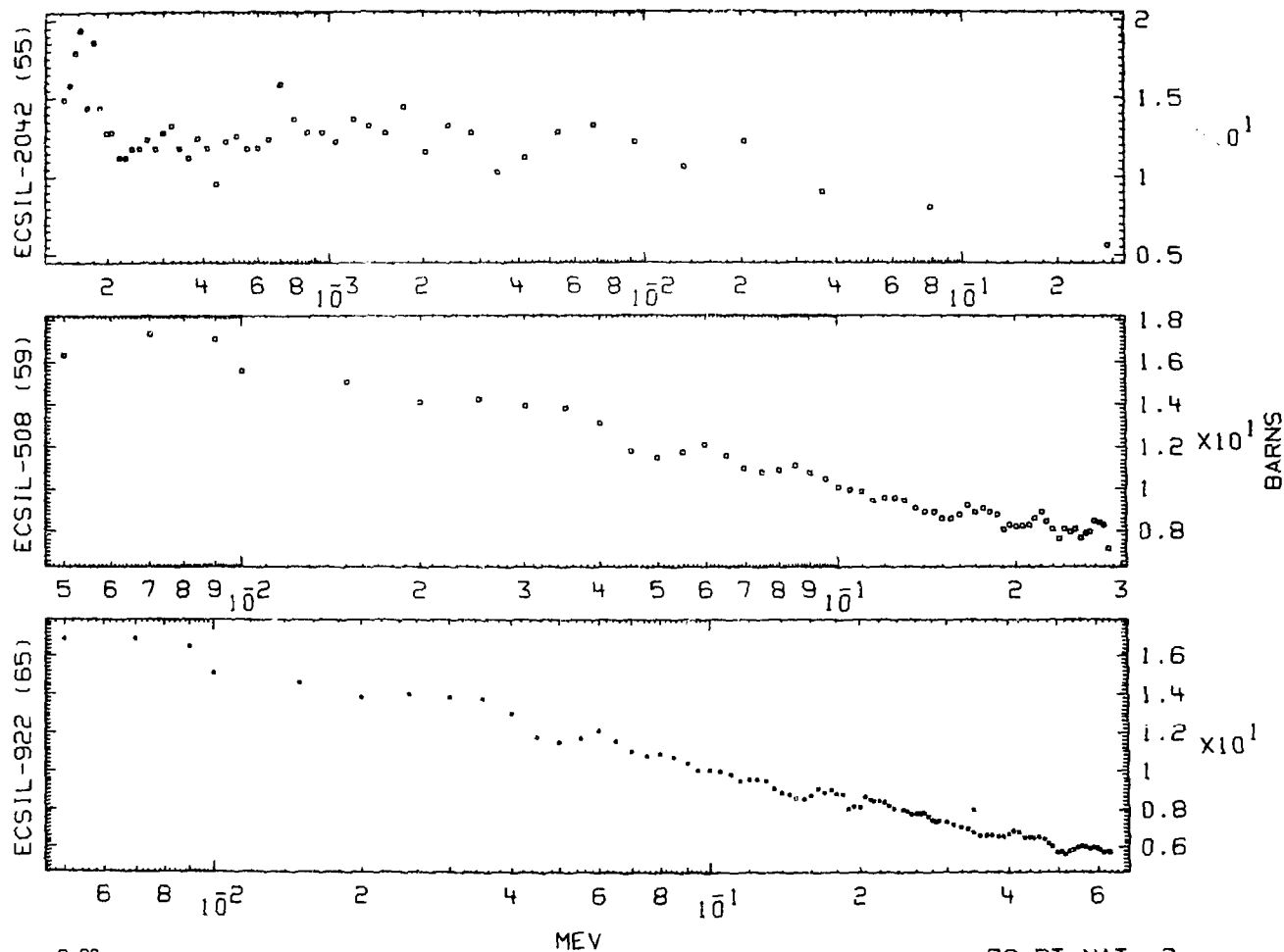
78-PT-NAT



03/01/74

TOTAL
CROSS SECTION

78-PT-NAT



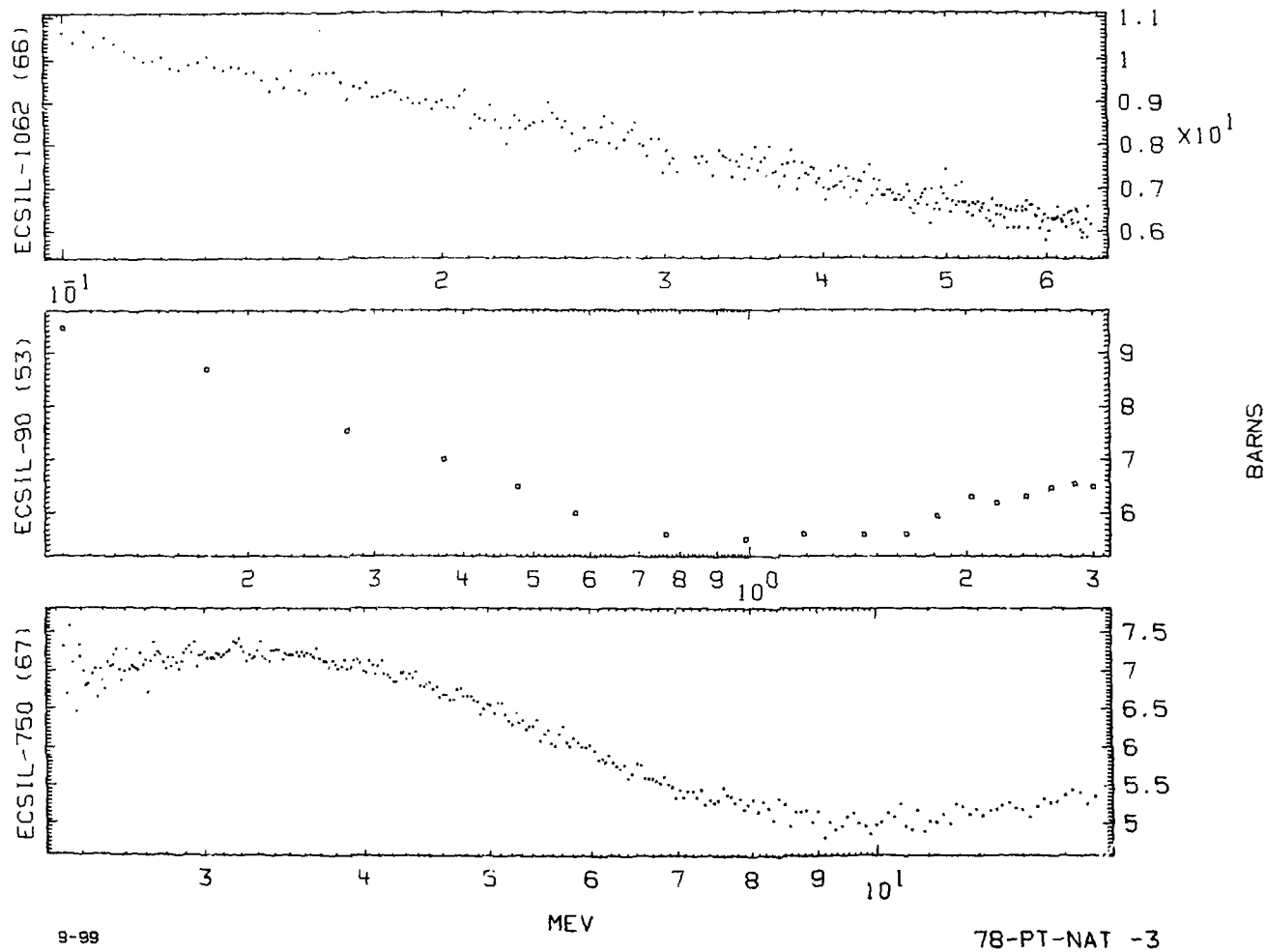
9-98

78-PT-NAT -2

03/01/74

TOTAL
CROSS SECTION

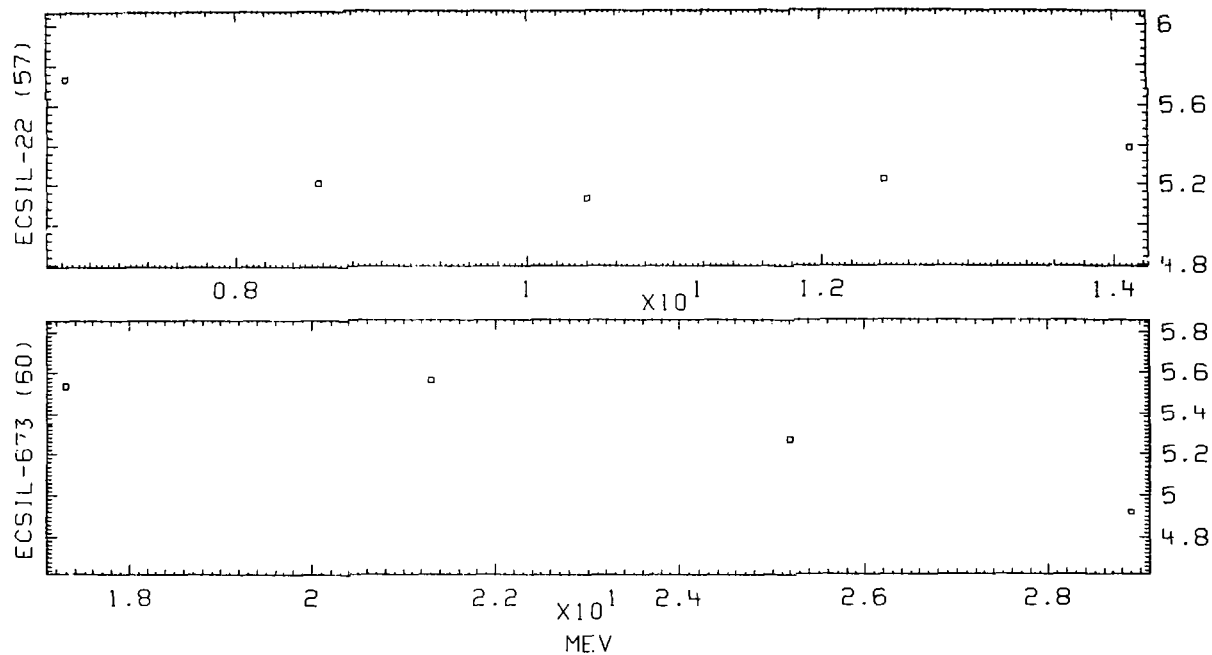
78-PT-NAT



03/01/74

TOTAL
CROSS SECTION

78-PT-NAT

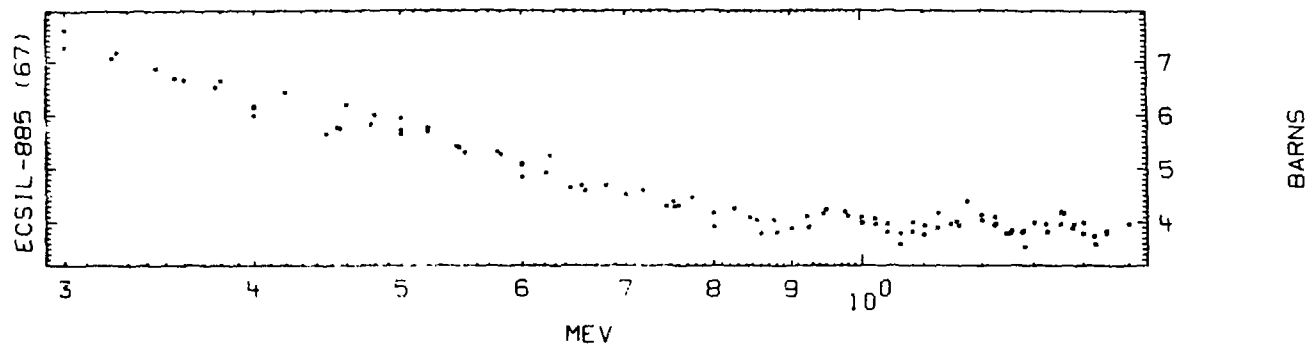


BARNs

03/01/74

ELASTIC
CROSS SECTION

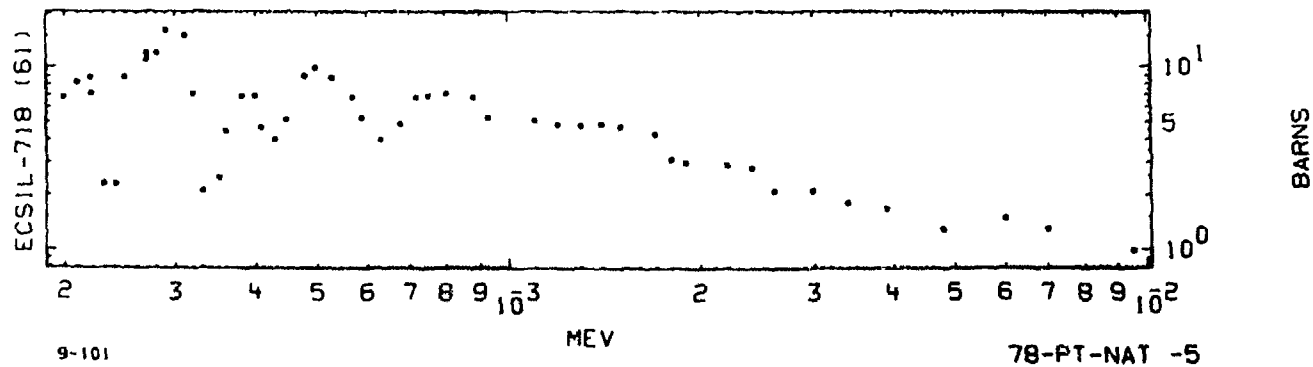
78-PT-NAT



03/01/74

N, GAMMA
CROSS SECTION

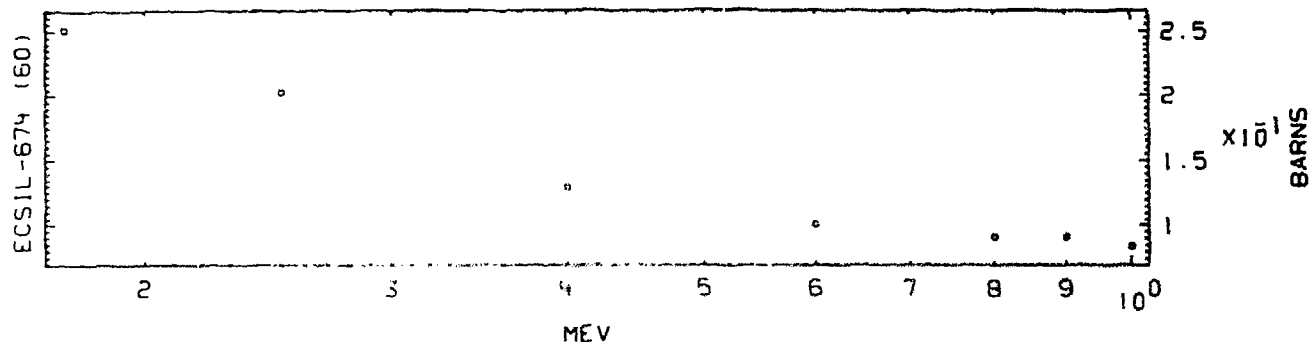
78-PT-NAT



03/01/74

N, GAMMA
CROSS SECTION

78-PT-NAT



03/01/74

TOTAL

78-PT-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs		
47	44	1.0000- 3	1.0000- 4	1.3000- 1	1.0000- 0	47	44	1.0000- 2	1.0000- 4	1.0500- 1	1.0000- 0
47	44	5.0000- 3	1.0000- 4	1.2000- 1	1.0000- 0	52	81	1.4000- 1		5.3610- 0	1.1000- 1

03/01/74

FISSION

78-PT-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
55	461	3.8000- 2		1.2000- 2

03/01/74

N, GAMMA

78-PT-NAT

REFERENCE		ENERGY MEV		DELTA MEV		X-SEC BARNs		DELTA BARNs
63	799	3.0000-	2	3.0000-	3	3.2100-	1	7.4010- 2
61	677	3.0000-	2	7.0010-	3	3.3000-	1	3.3000- 2
63	1	3.0000-	2	8.0010-	5	3.3000-	1	3.0000- 2
61	677	6.5000-	2	2.0000-	2	2.3500-	1	2.3000- 2
63	1	6.5000-	2	2.1000-	2	2.3400-	1	2.1000- 2

03/01/74

N, GAMMA
CROSS SECTION

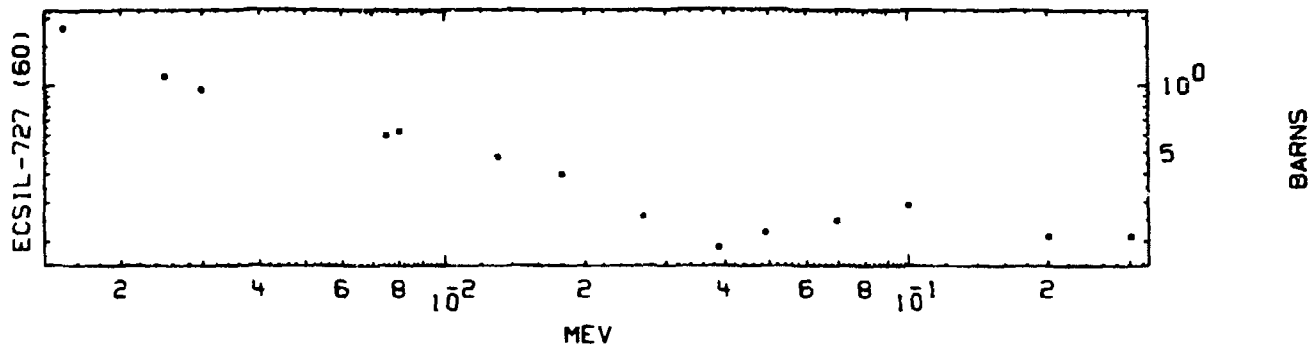
78-PT-196

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE HOURS
1781	2.4000- 2		1.4500- 1	2.0000- 2	
5 23	2.1000- 2	4.0000- 3	2.0000- 1	6.0010- 2	1.9000- 1

03/01/74

N, GAMMA
CROSS SECTION

78-PT-198



03/01/74

N, GAMMA

78-PT-198

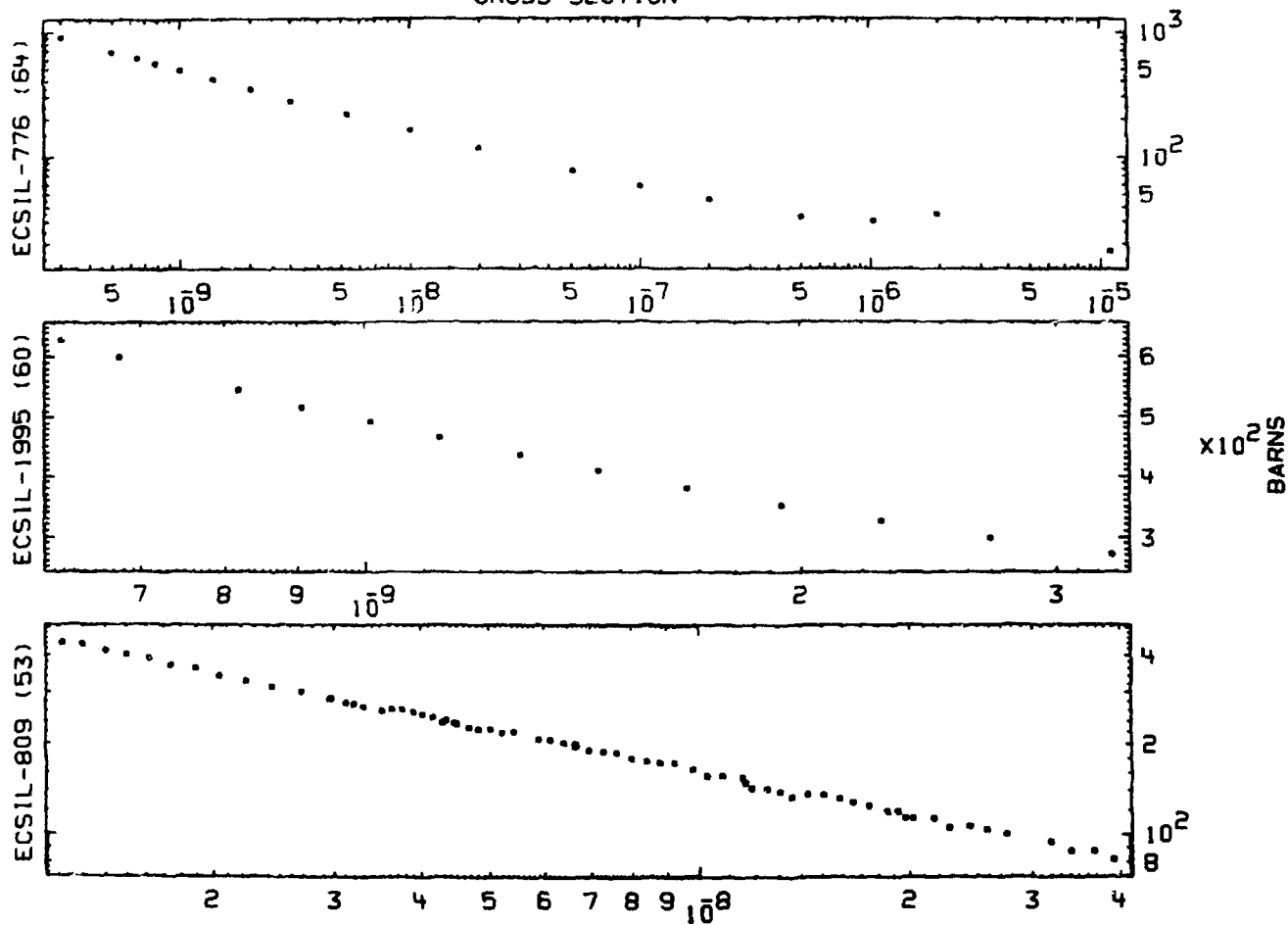
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
57	521 1.4500- 1		1.7000- 3	3.0000- 4

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN	HALF-LIFE MINUTES
57	23 2.1000- 2	4.0000- 3	2.3000- 1	8.0010- 2	3.0000- 1
66	1788 2.4000- 2		2.0500- 1	3.0000- 2	3.0000- 1
47	888 2.5300- 0		3.9200- 0	7.8400- 1	3.1000- 1

03/01/74

TOTAL
CROSS SECTION

79-AU-197



9-105

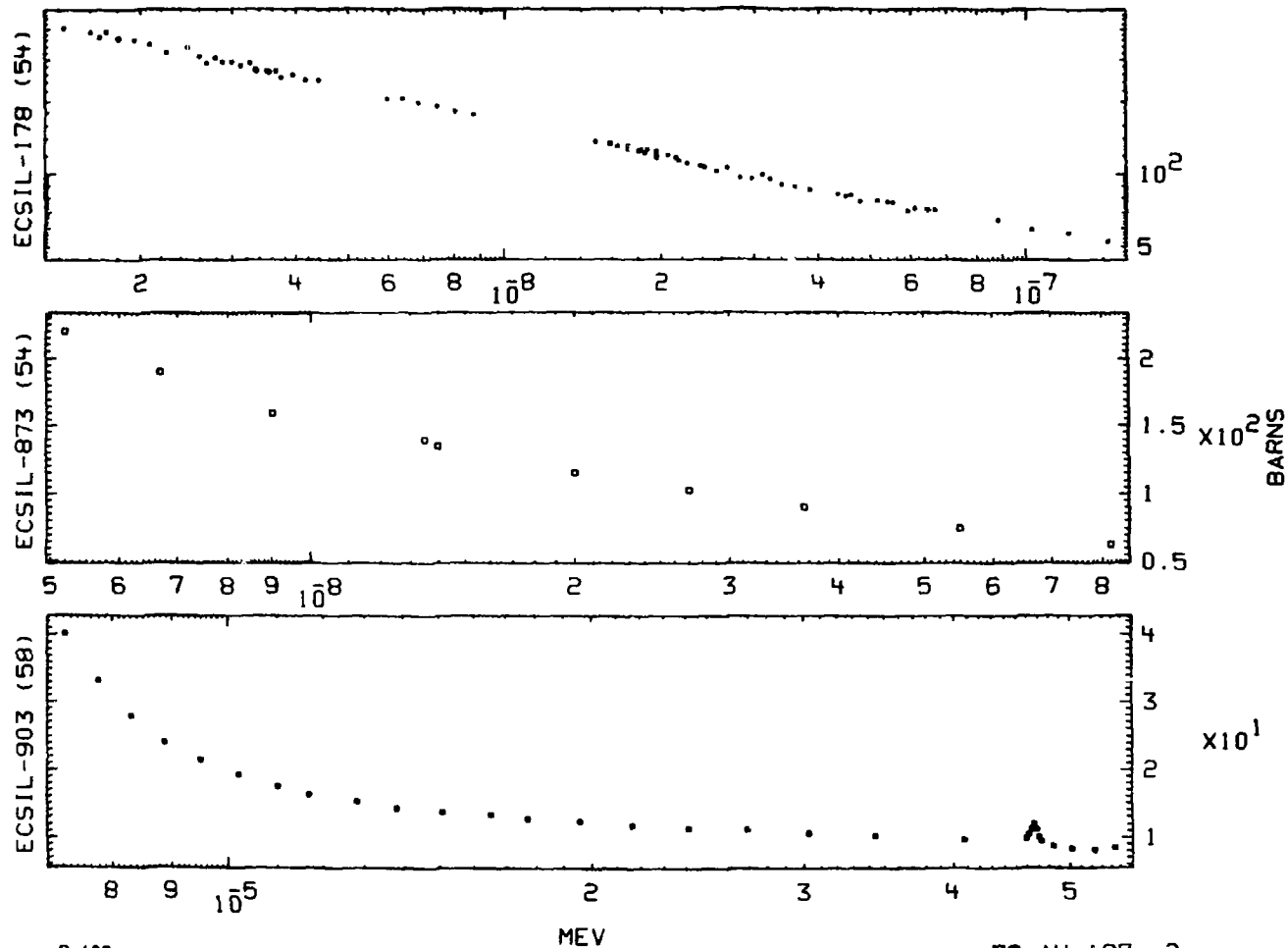
MEV

79-AU-197 -1

03/01/74

TOTAL
CROSS SECTION

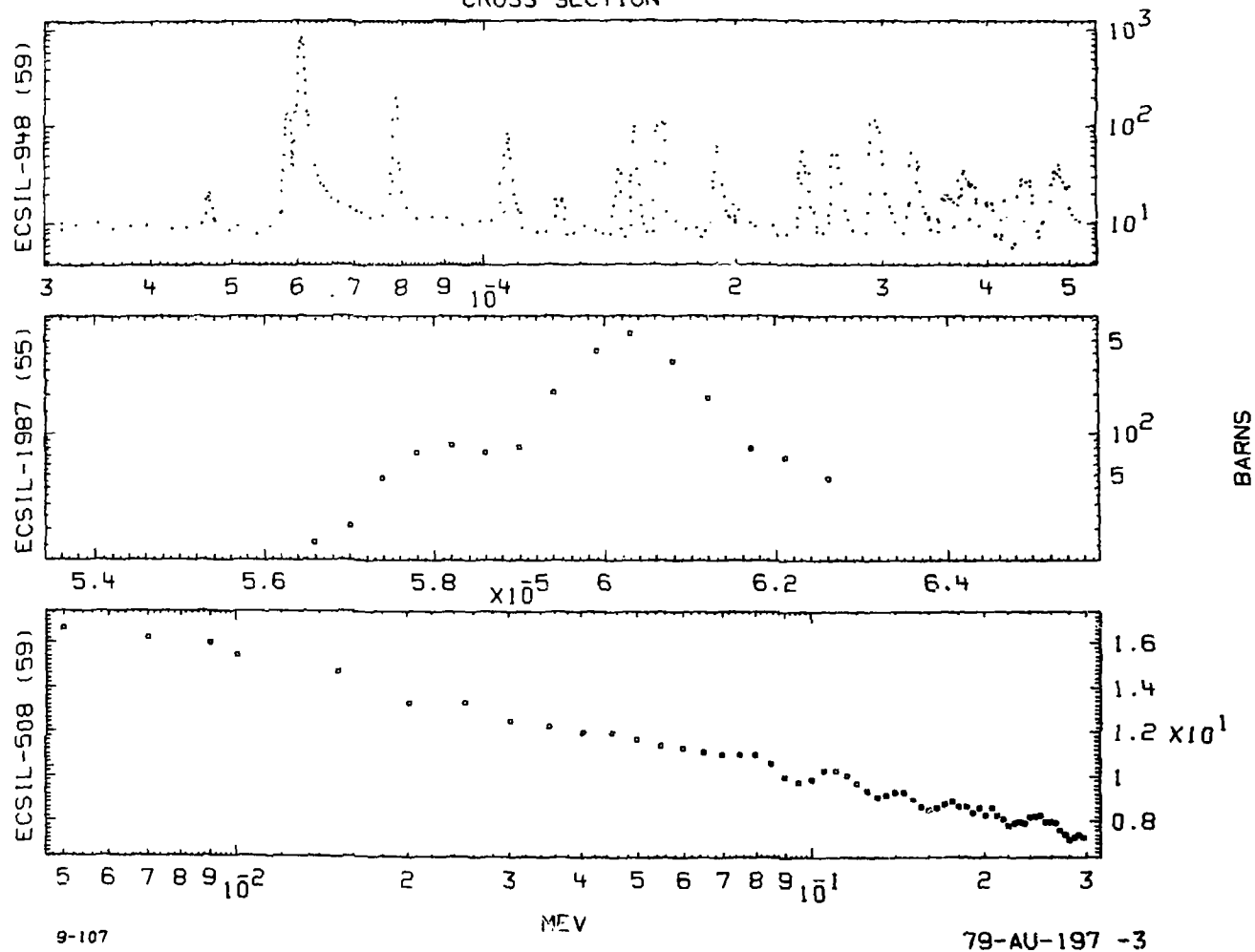
79-AU-197



03/01/74

TOTAL
CROSS SECTION

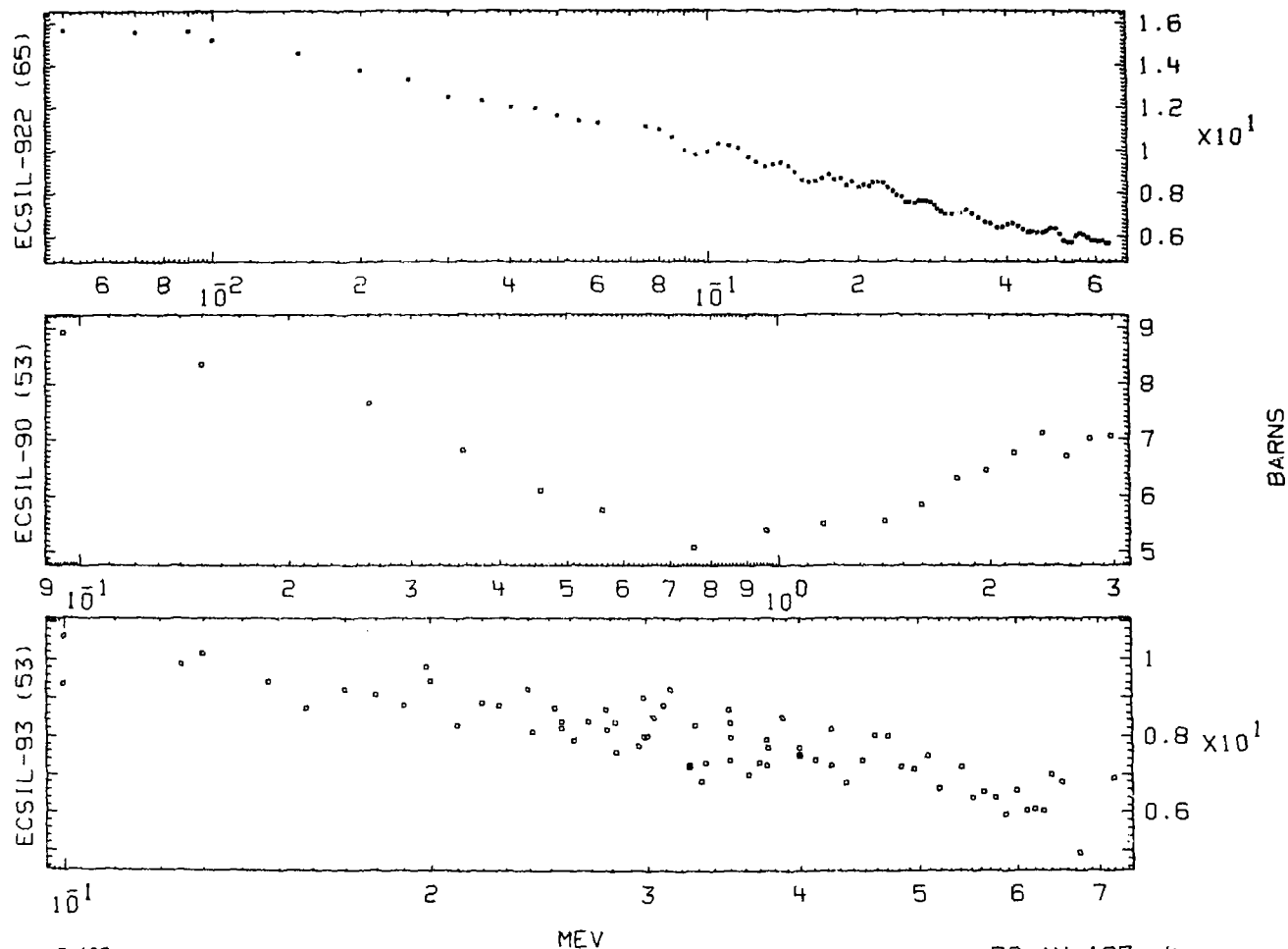
79-AU-197



03/01/74

TOTAL
CROSS SECTION

79-AU-197



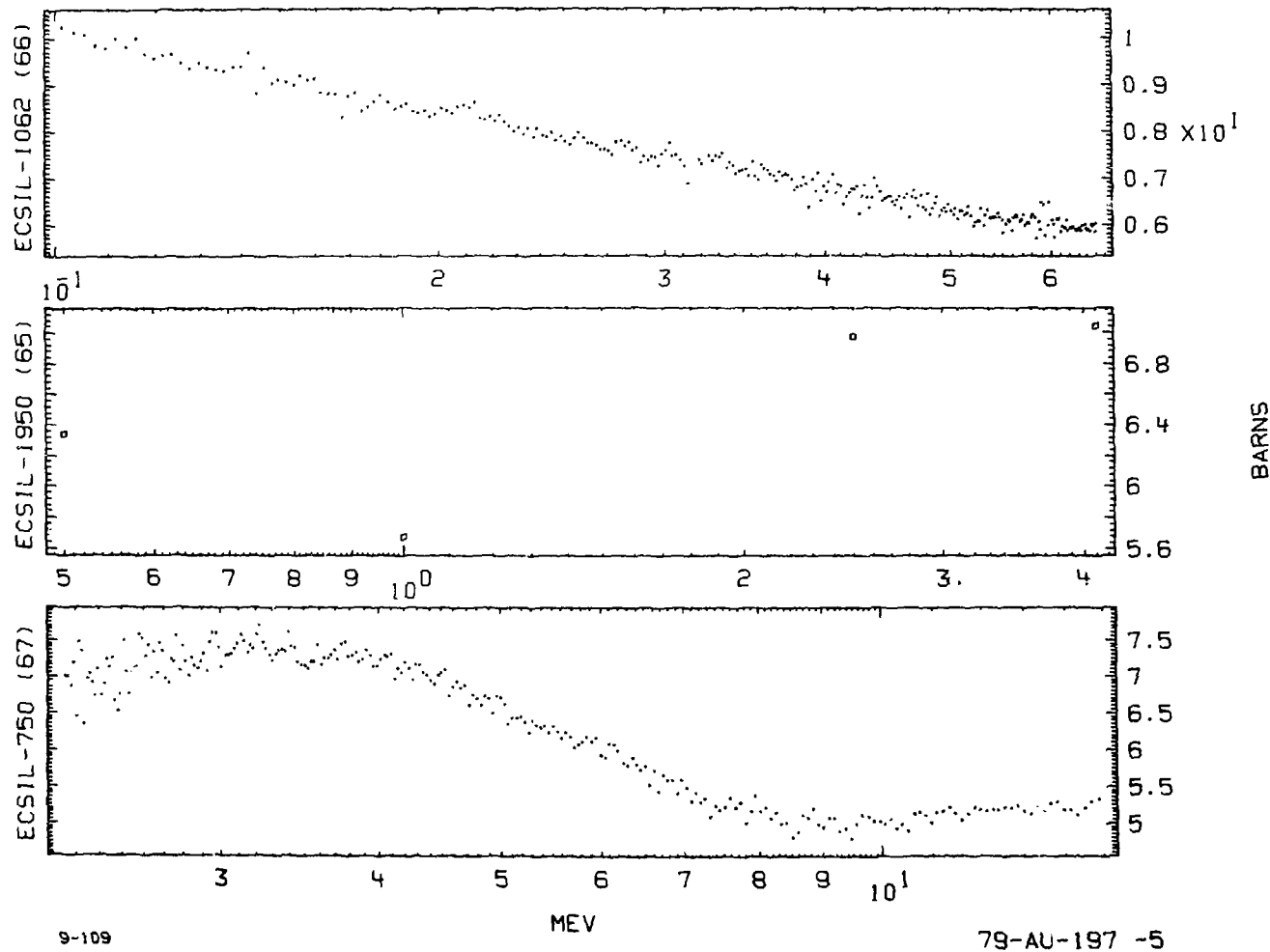
9-108

79-AU-197 -4

03/01/74

TOTAL
CROSS SECTION

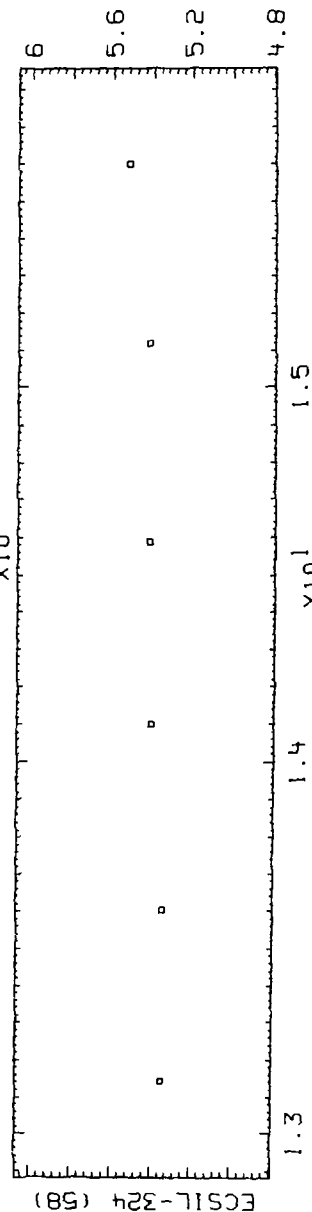
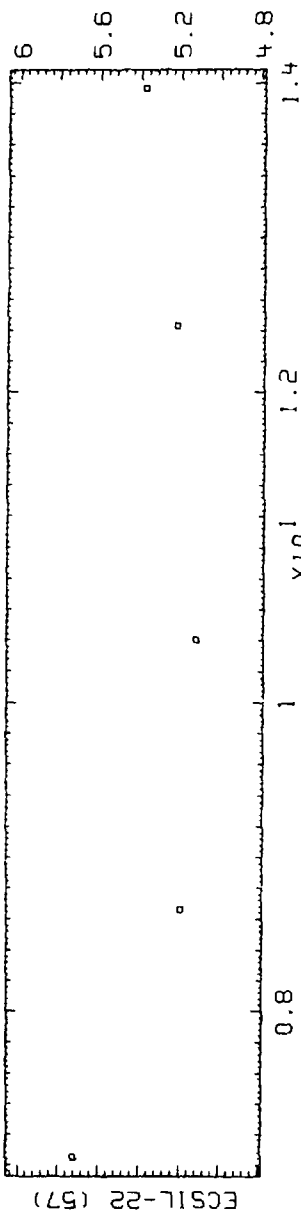
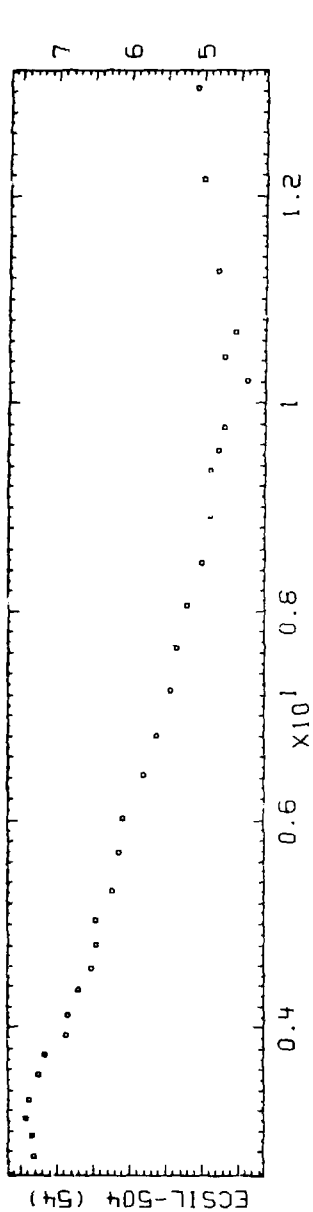
79-AU-197



03/01/74

TOTAL CROSS SECTION

79-AU-197



BAHNS

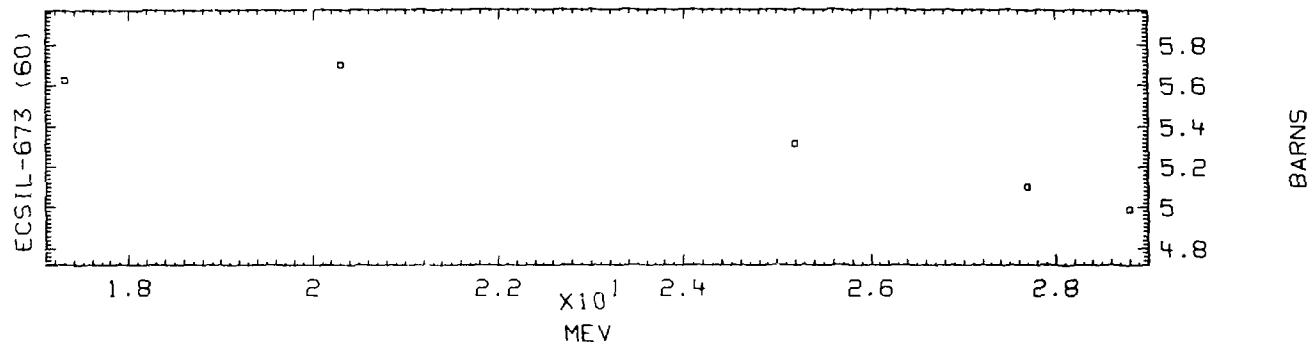
9-1110

79-AU-197 -6

03/01/74

TOTAL
CROSS SECTION

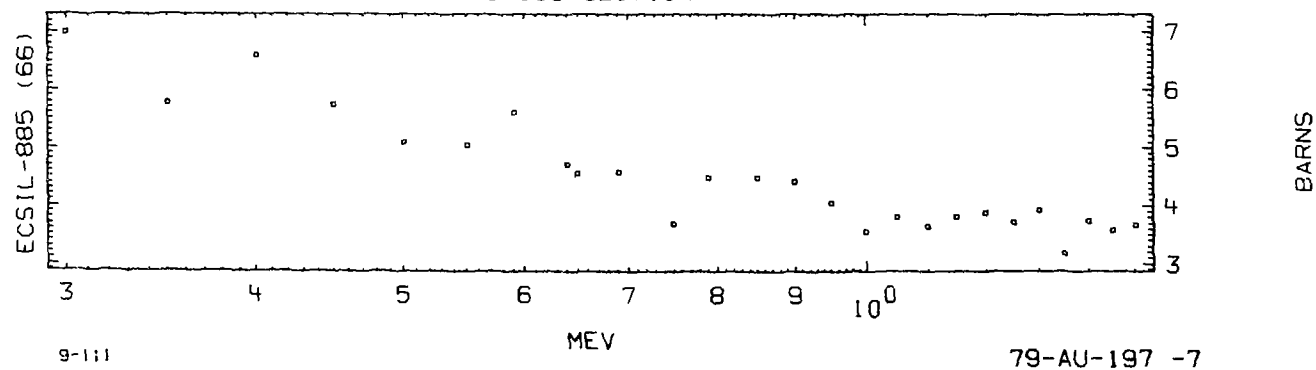
79-AU-197



03/01/74

ELASTIC
CROSS SECTION

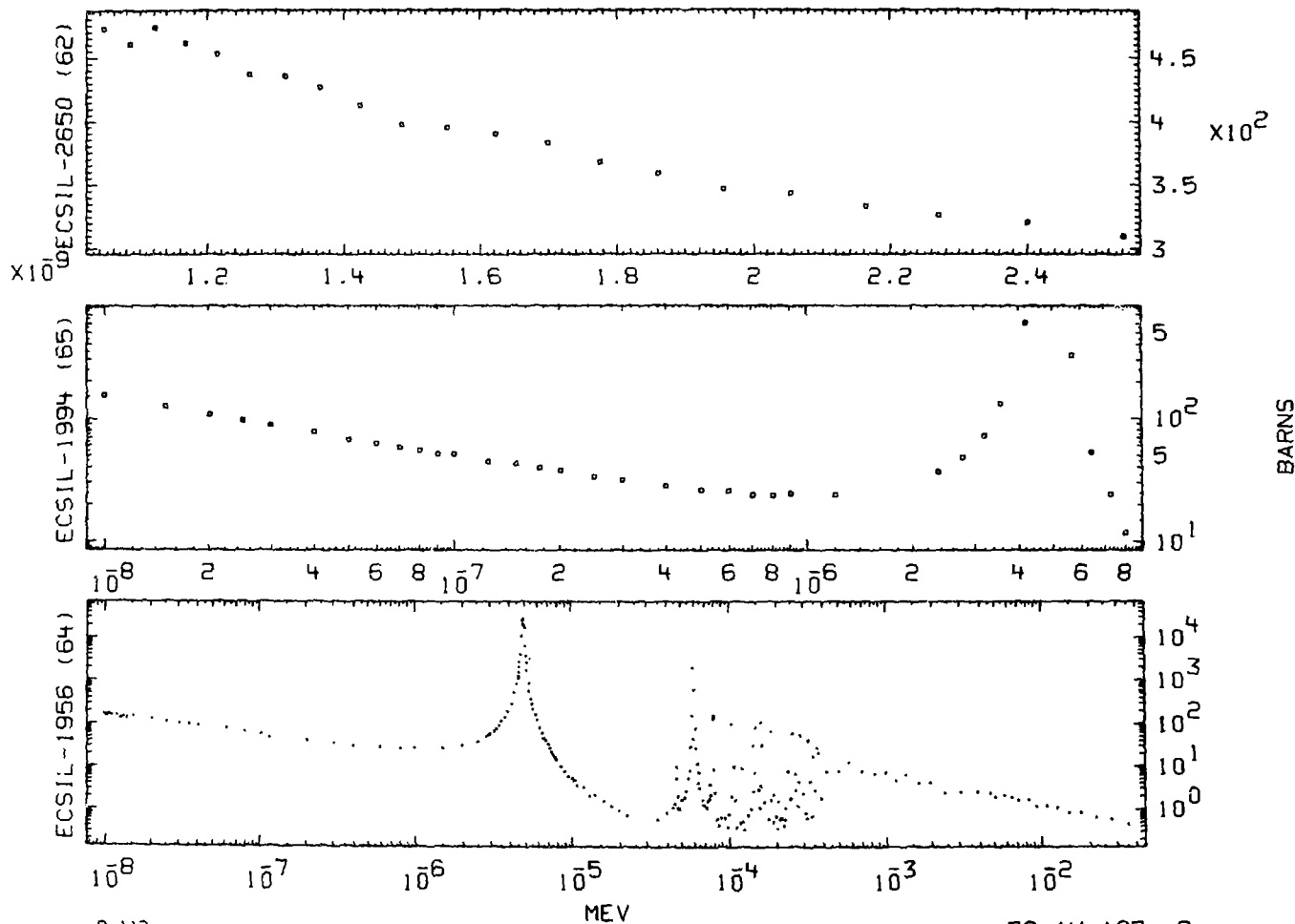
79-AU-197



03/01/74

N, GAMMA
CROSS SECTION

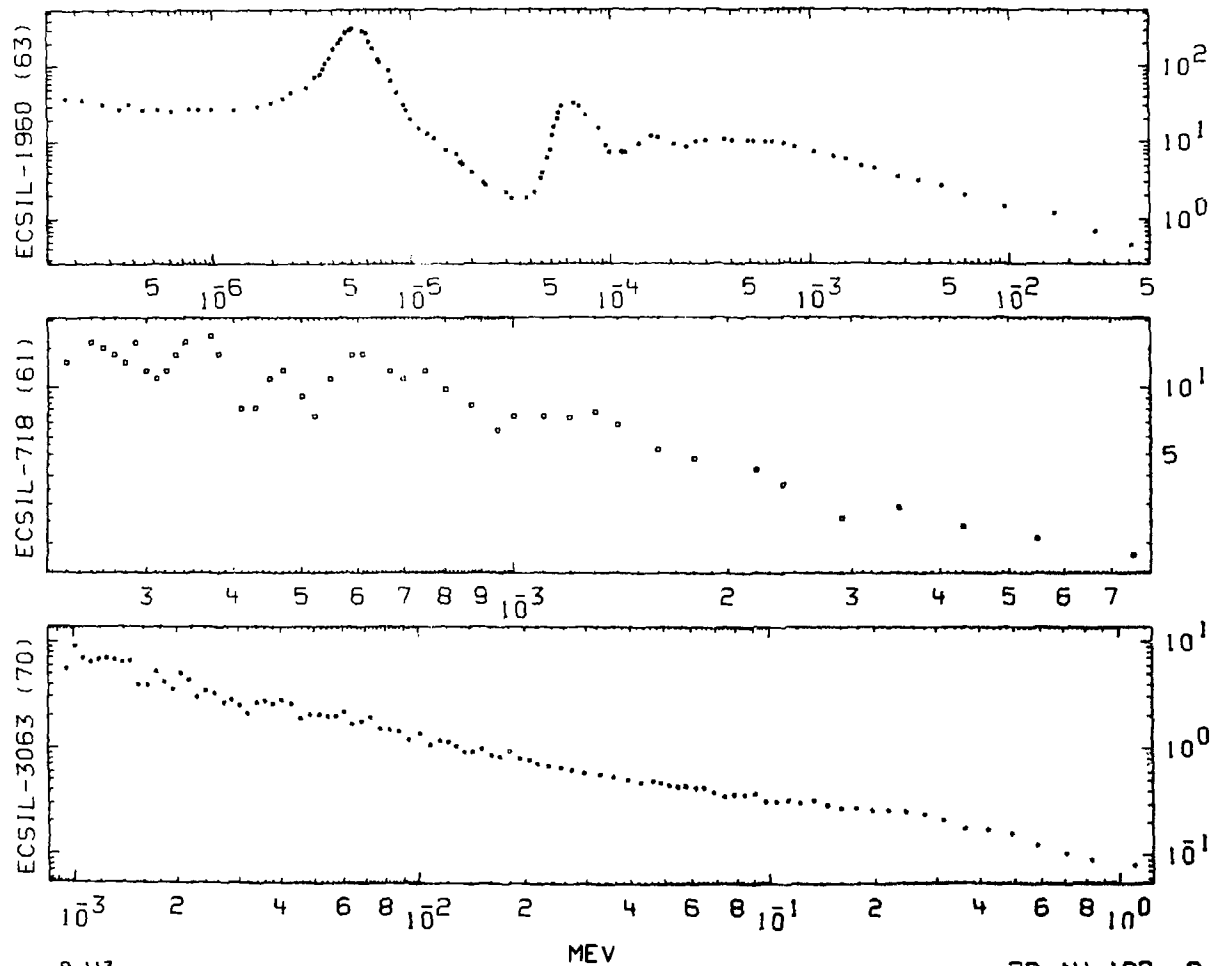
79-AU-197



03/01/74

N, GAMMA
CROSS SECTION

79-AU-197



9-113

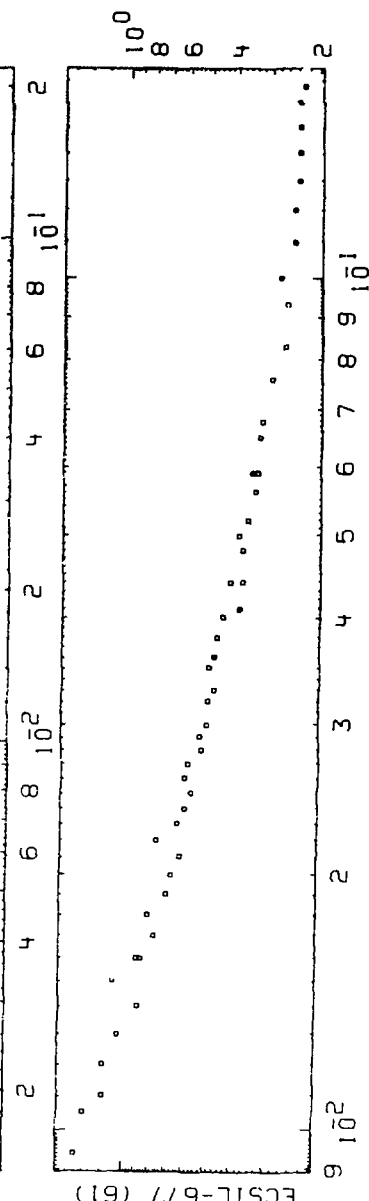
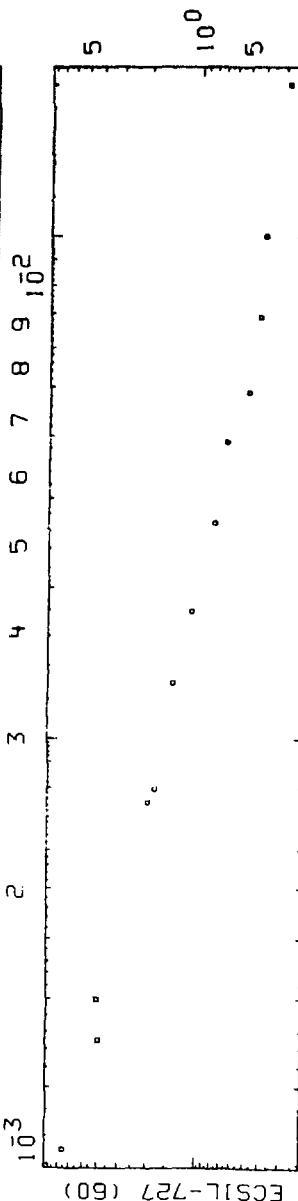
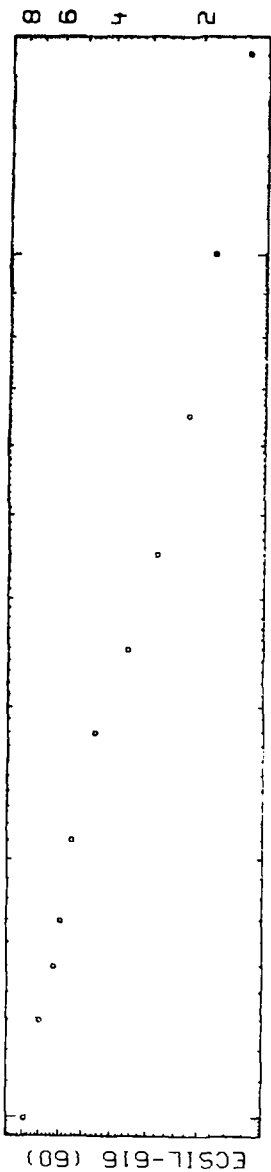
79-AU-197 -9

03/01/74

N. GAMMA

CROSS SECTION

79-AU-197



BARNs

MEV

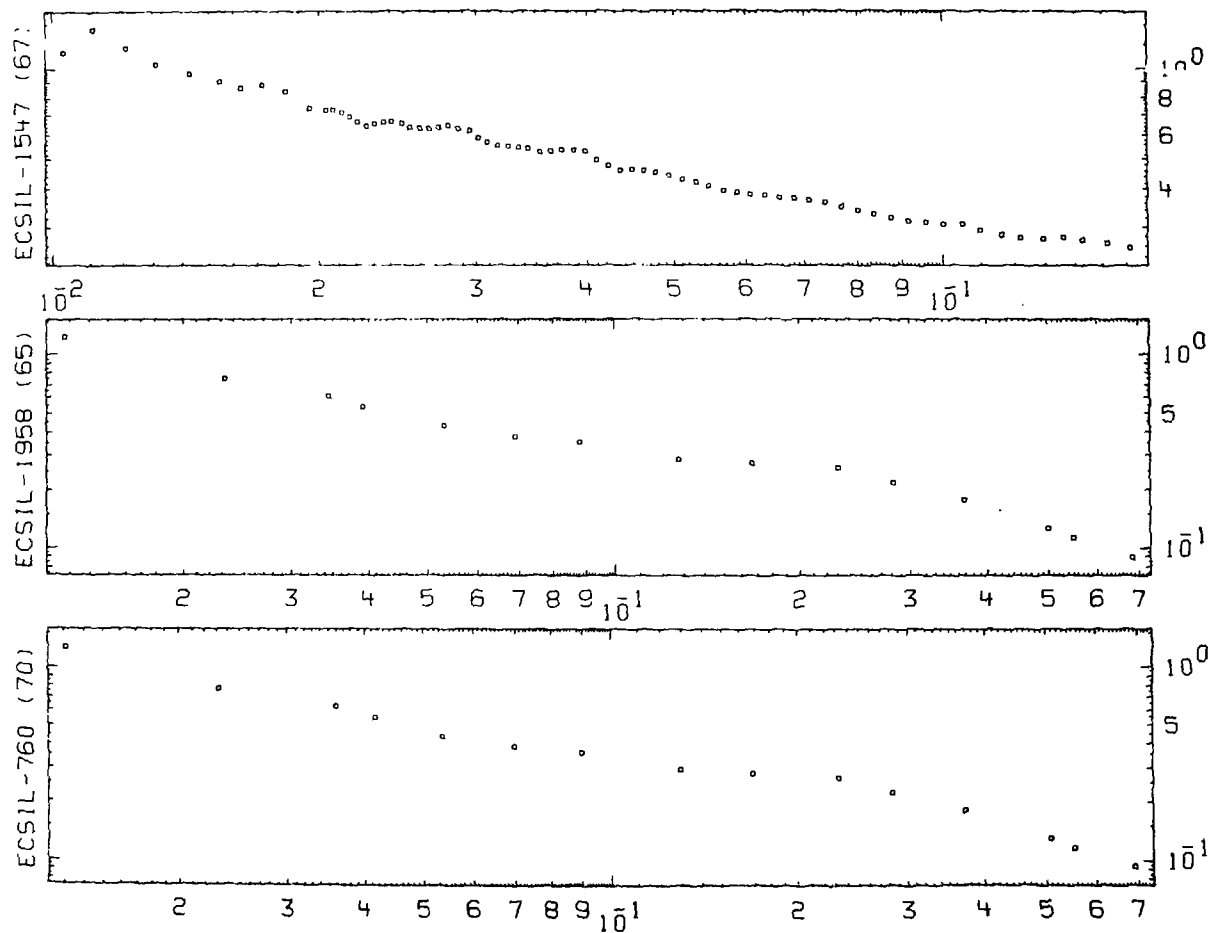
9-114

79-AU-197 -10

03/01/74

N. GAMMA
CROSS SECTION

79-AU-197

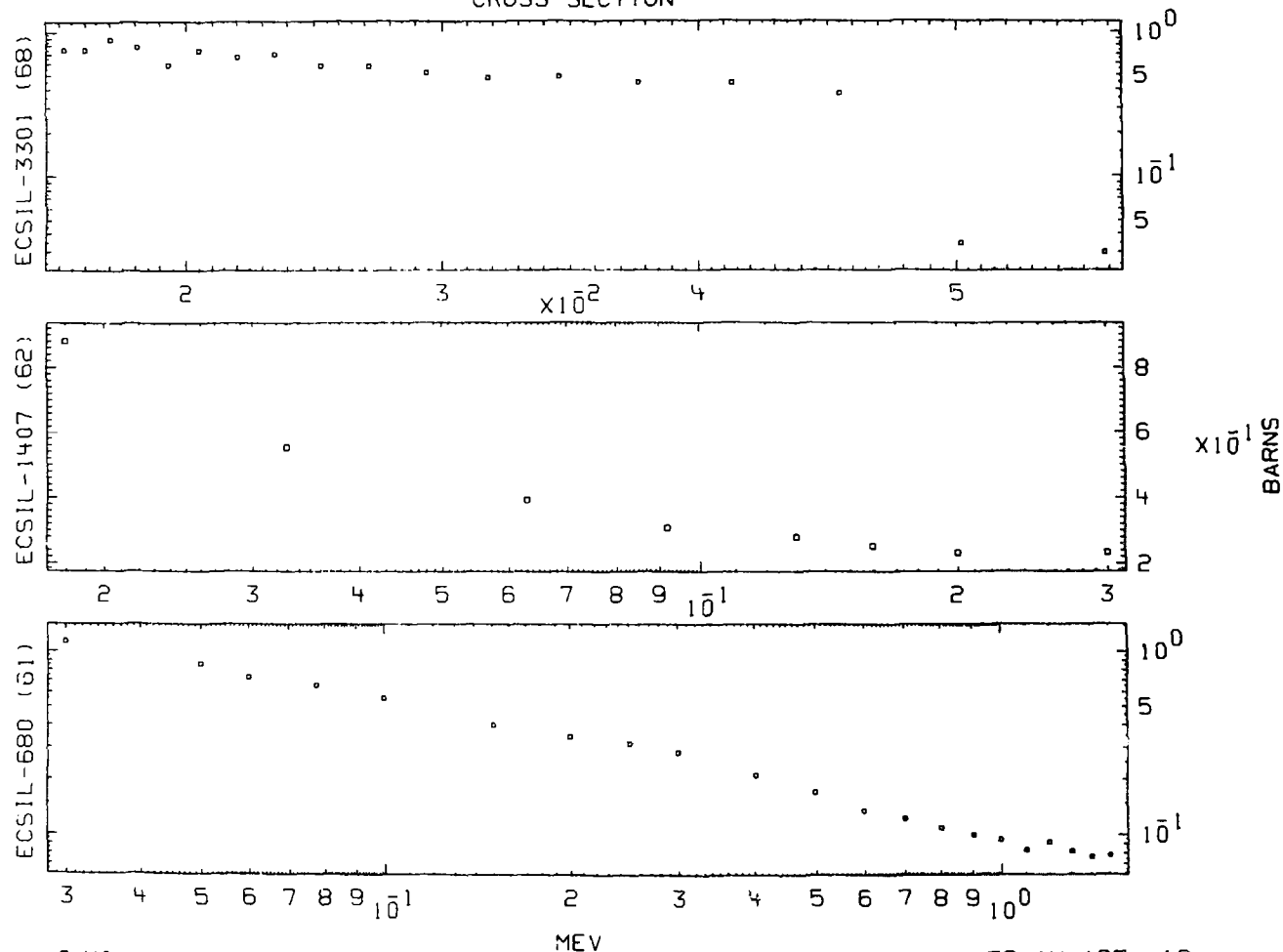


BARN

03/01/74

N, GAMMA
CROSS SECTION

79-AU-197



9-116

MEV

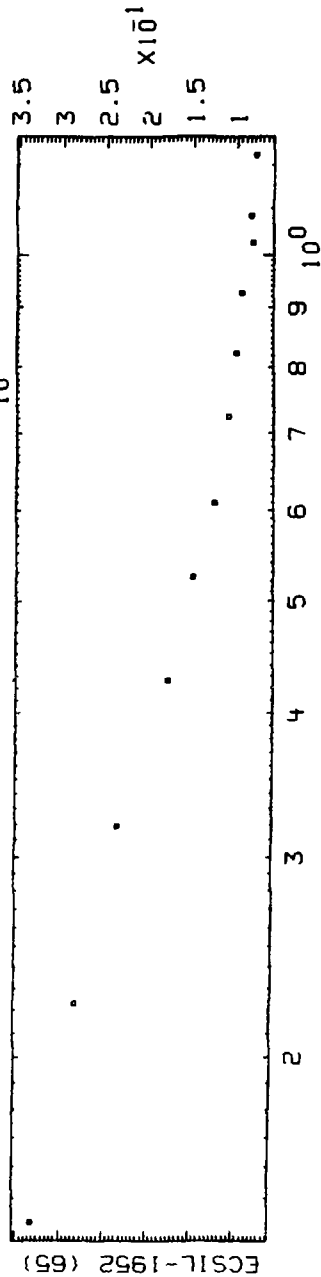
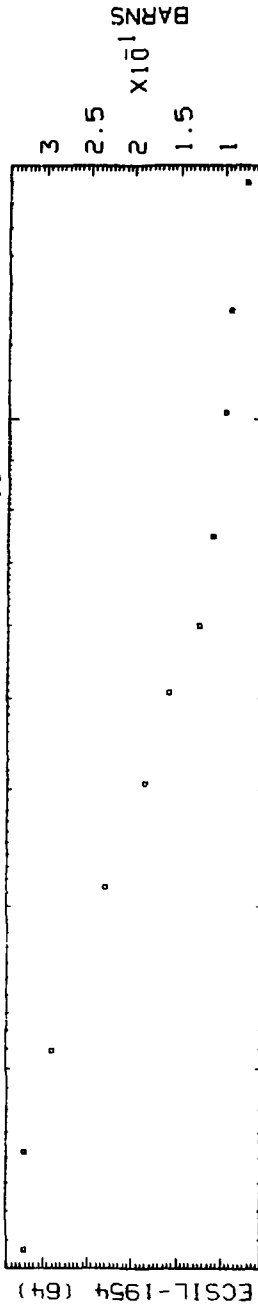
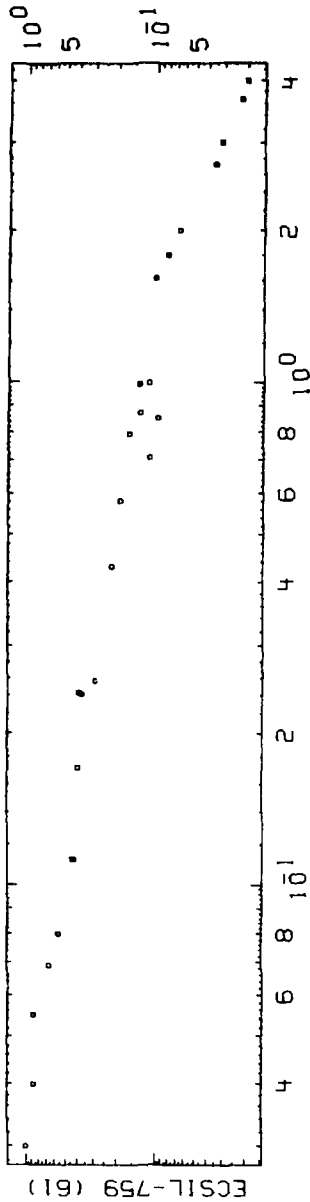
79-AU-197 -12

03/01/74

N. GAMMA

79-AU-197

CROSS SECTION



9-117

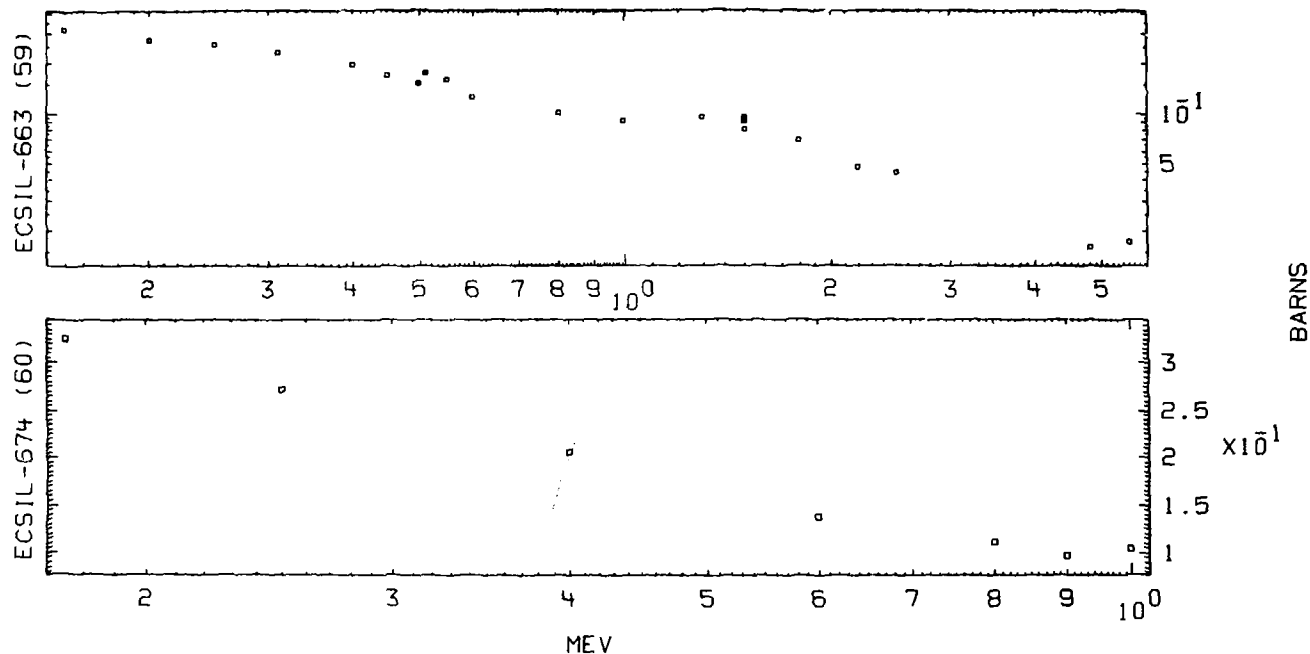
MEV

79-AU-197 -13

03/01/74

N, GAMMA
CROSS SECTION

79-AU-197



03/01/74

TOTAL

79-AU-197

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
71	3110	2.5300- 8	1.0350+ 2	2.5000+ 0	49	844	3.0000- 4	3.0000- 5	1.0800+ 1
54	2651	2.5300- 8	1.0500+ 2	1.0000+ 0	55	296	4.1000+ 0	4.0000- 2	7.1010+ 0
65	949	1.4400- 6	3.0900+ 1	2.0000- 1	52	81	1.4000+ 1		5.3110+ 0
49	844	1.1500- 4	1.1500- 5	1.0600+ 1					1.1000- 1

03/01/74

ELASTIC
CROSS SECTION

79-AU-197

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
56	149 5.0000-	1 6.0010-	2 5.4010+	0 5.0000-	54	103 1.0000+	0 8.0000-	2 4.1000+	0 6.1500-

03/01/74

FISSION

79-AU-197

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
55	461 3.8000+	2	2.0000-	2

03/01/74

N, GAMMA

79-AU-197

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
47	888 2.5300-	8	9.6400+	1 9.6400+	0				
68	1990 2.5300-	8	9.8500+	1 2.0000+	0				
57	23 2.1000-	2 4.0000-	3 8.7010-	1 1.9000-	1				
58	43 2.1000-	2 4.0000-	3 9.3410-	1 6.0010-	3				
65	867 2.4000-	2	5.0000-	1 3.5000-	2				
57	305 2.4000-	2 5.0000-	3 1.1200+	0 1.1000-	1				
62	697 2.5000-	2 5.0000-	3 8.0010-	1 2.8000-	1				
60	639 2.5000-	2 5.0000-	3 5.8510-	1 6.0010-	2				
60	633 2.5000-	2 1.0000-	3 6.0510-	1 3.0000-	1				
66	1955 3.0000-	2 1.0000-	2 6.0000-	1 1.2000-	2				
63	739 3.0000-	2	5.1300-	1 1.0260-	1				
61	684 3.0000-	2 8.0010-	3 7.6710-	1 6.0010-	2				
63	1 3.0000-	2 8.0010-	3 5.1510-	1 4.6000-	2				
61	684 3.1000-	2	5.3010-	1 6.0010-	2				
66	1955 6.4000-	2	3.5700-	1 1.4000-	2				
61	684 6.4000-	2 2.0000-	2 4.5600-	1 4.0000-	2				
63	1 6.5000-	2 2.1000-	2 3.3200-	1 3.0000-	2				
67	1807 1.2500-	1 2.3000-	2 2.7250-	1 1.5300-	2				
67	1807 1.5000-	1 2.1000-	2 2.5250-	1 1.8200-	2				
59	607 1.5000-	1 1.5000-	2 2.7000-	1 1.8000-	2				
59	524 1.8000-	1 4.0000-	2 3.1000-	1 3.0000-	2				
67	1807 1.8200-	1 2.1000-	2 2.3060-	1 1.5900-	2				
59	526 1.9500-	1 1.5000-	2 3.2000-	1 2.0000-	2				
58	363 2.0000-	1	3.9000-	1 2.5000-	2				
60	633 2.2000-	1 2.0000-	2 3.3000-	1 3.0000-	2				
59	607 5.5000-	1 3.0000-	2 1.1800-	1 8.0010-	3				
59	607 1.0000+	0 3.0000-	2 9.7010-	2 1.3000-	2				
44	260 1.7300+	0 7.0010-	2 8.8010-	2 1.8000-	2				
67	1991 3.0000+	0 2.0000-	1 3.5200-	2 3.0000-	3				
44	260 3.0000+	0 7.0010-	2 4.9000-	2 1.0000-	2				
71	3194 1.4000+	1	9.3800-	4 2.3450-	4				

03/01/74

TOTAL
CROSS SECTION

79-AU-198

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63 2652	2.5300- 8		2.5600+ 4	1.2800+ 3

03/01/74

N, GAMMA

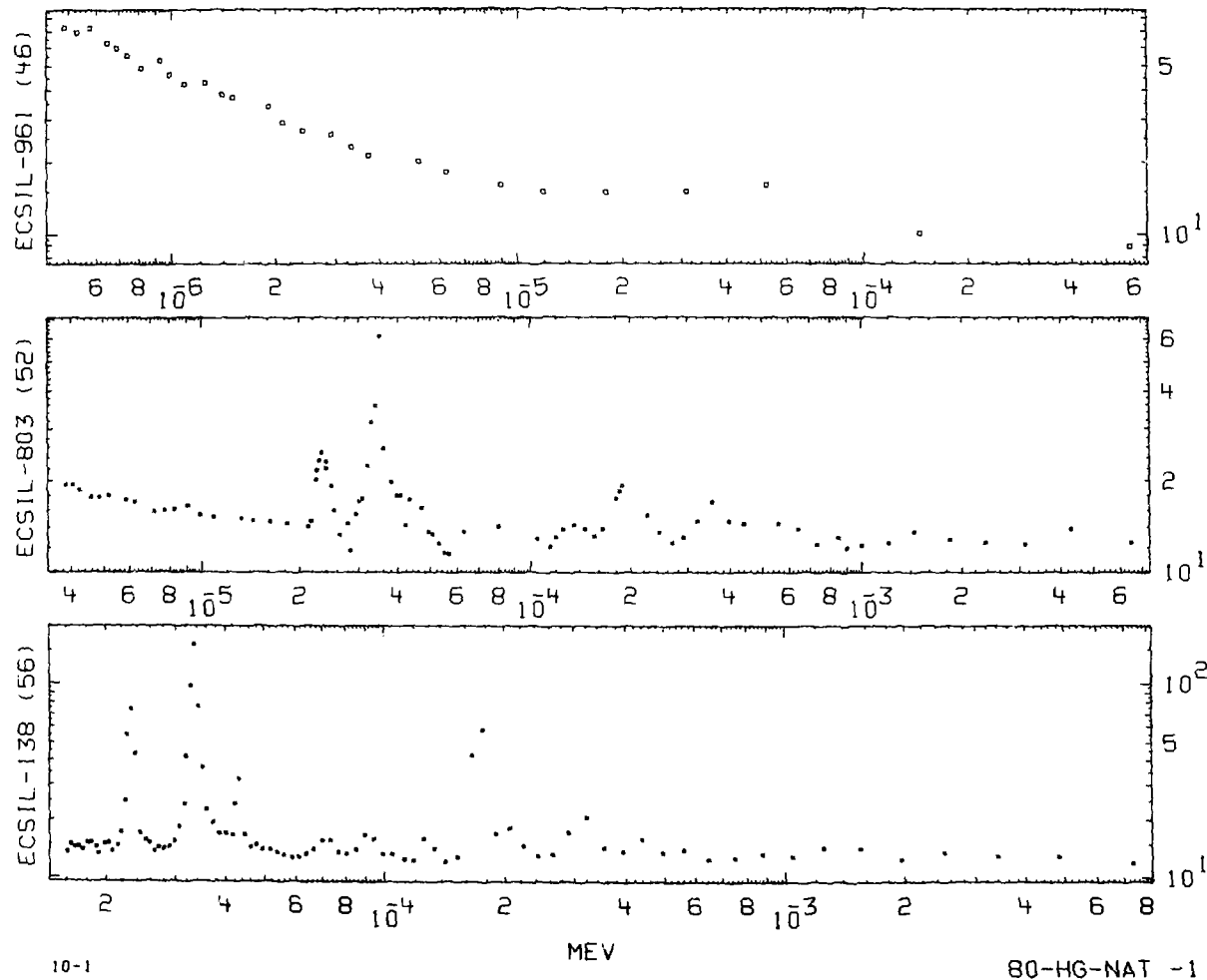
79-AU-198

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
51 2844	2.5300- 8		3.8000+ 4	

03/01/74

TOTAL
CROSS SECTION

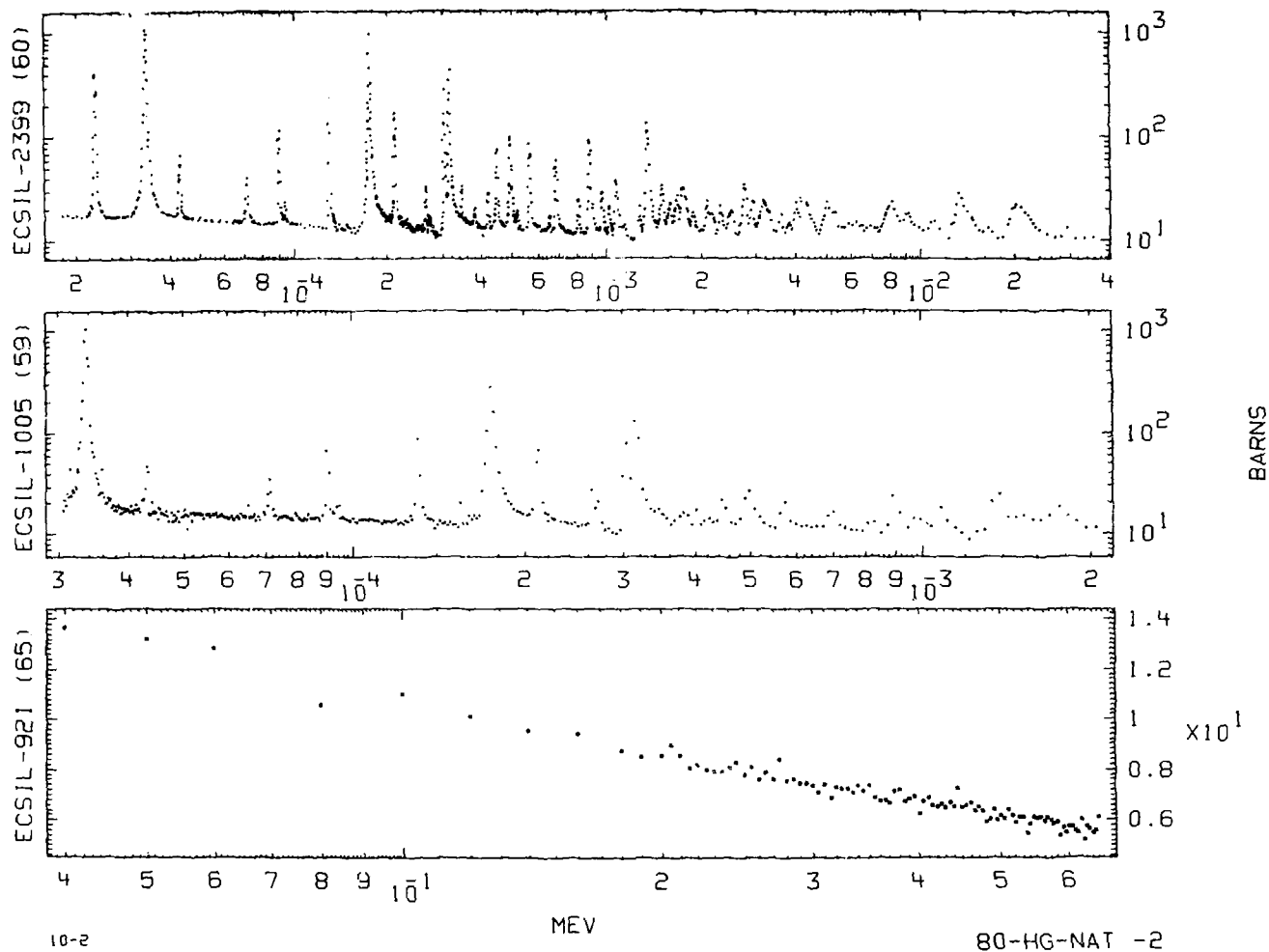
80-HG-NAT



03/01/74

TOTAL
CROSS SECTION

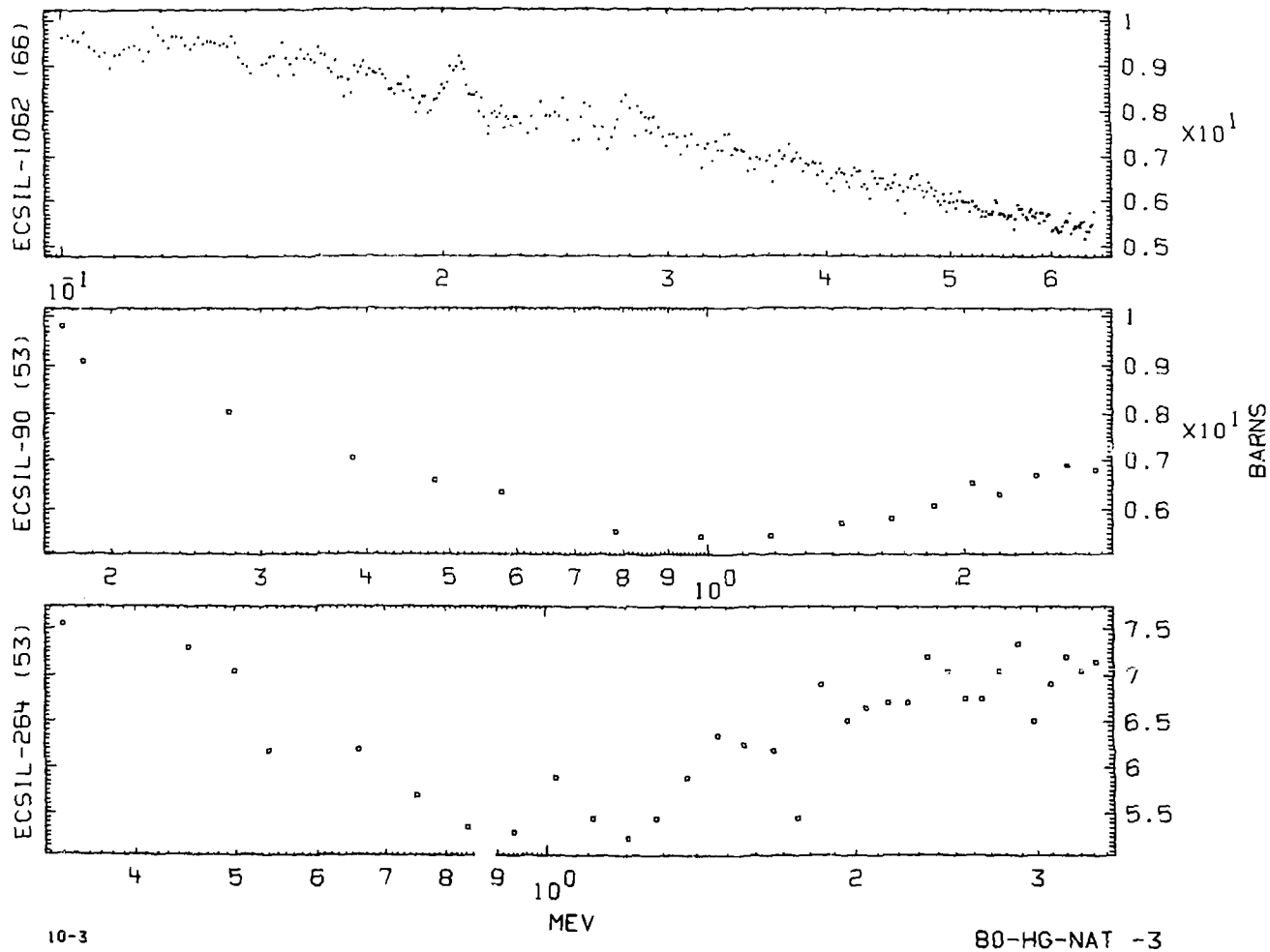
80-HG-NAT



03/01/74

TOTAL
CROSS SECTION

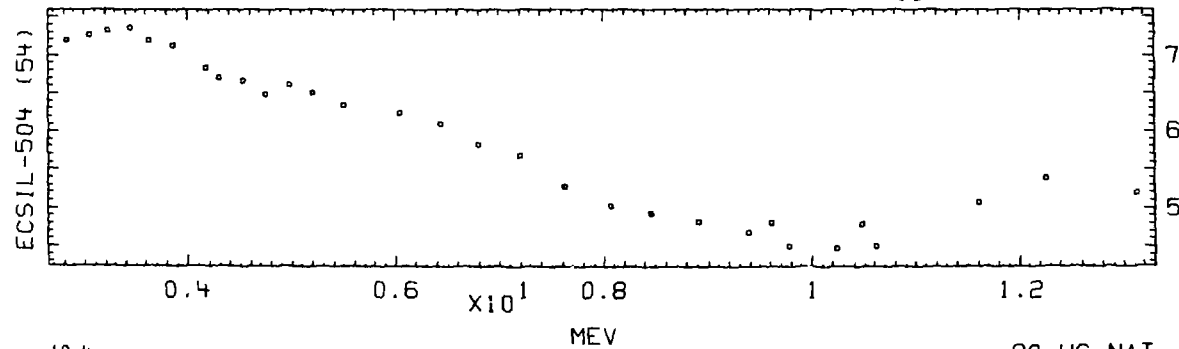
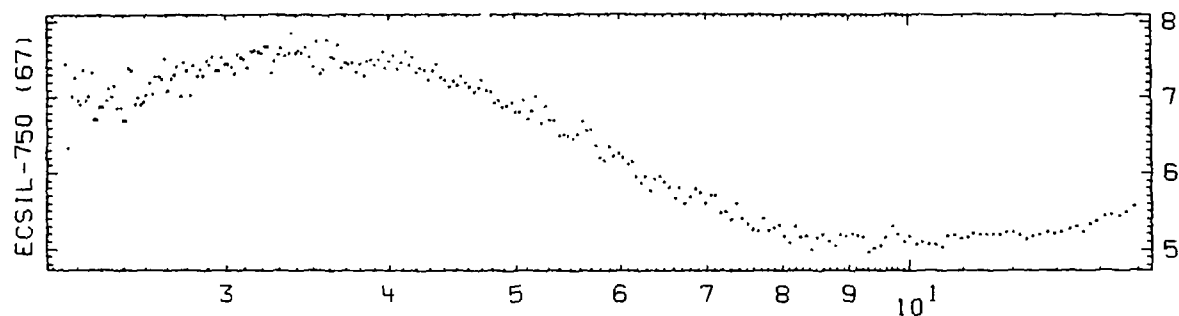
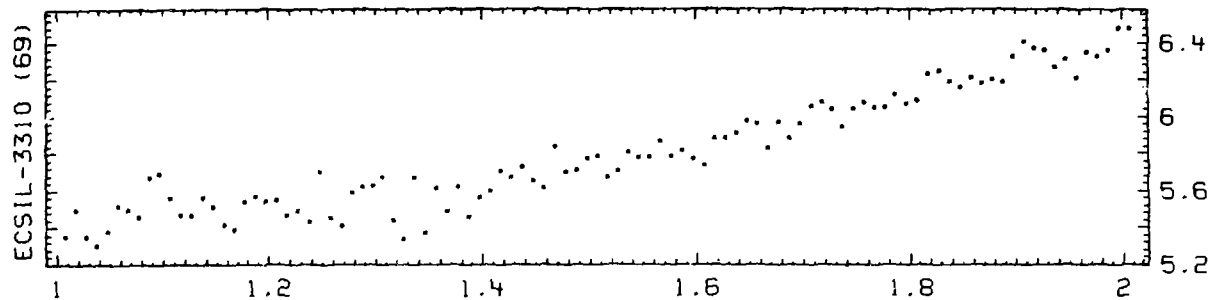
80-HG-NAT



03/01/74

TOTAL
CROSS SECTION

80-HG-NAT



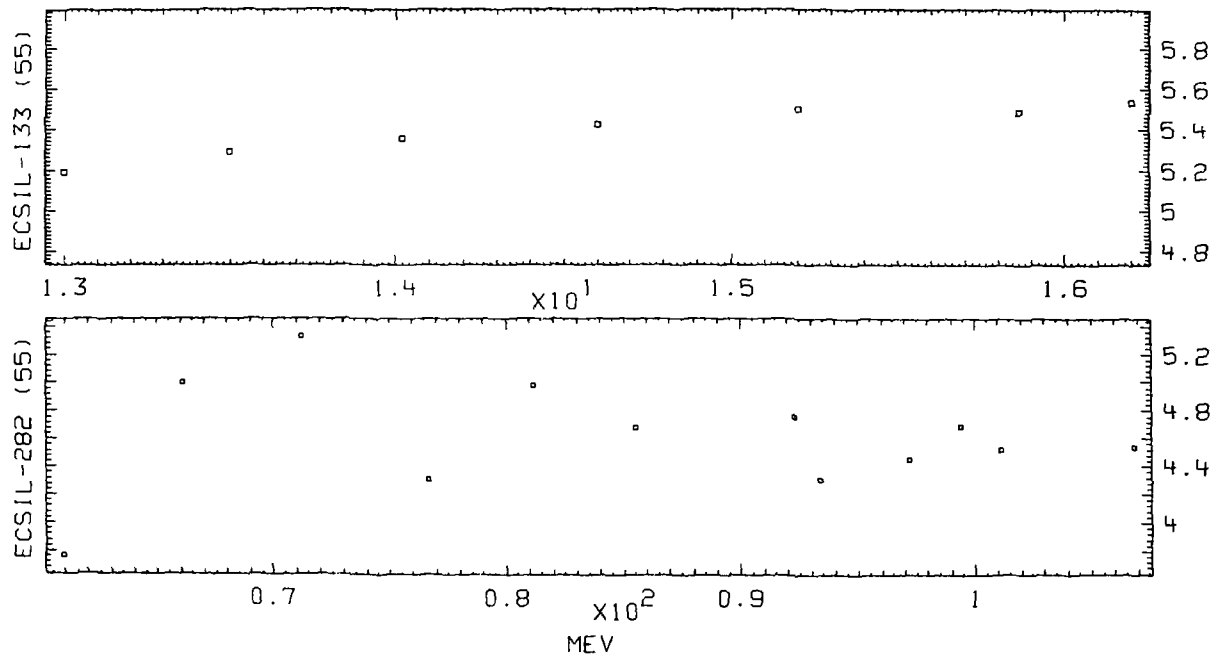
BARNs

80-HG-NAT -4

03/01/74

TOTAL
CROSS SECTION

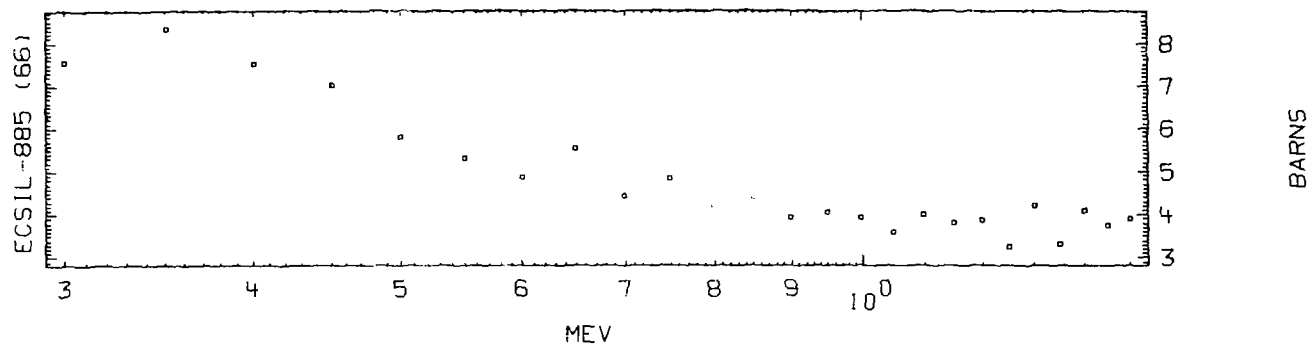
80-HG-NAT



03/01/74

ELASTIC
CROSS SECTION

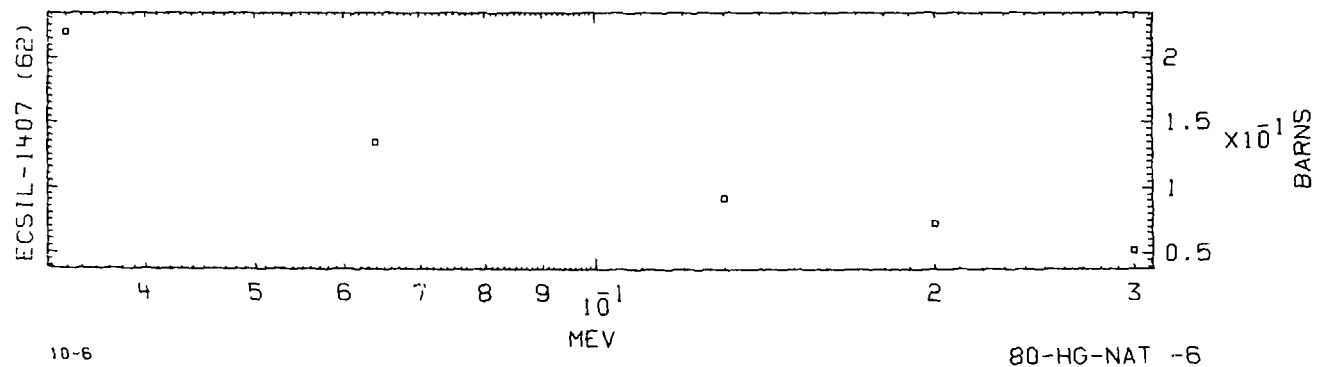
80-HG-NAT



03/01/74

N, GAMMA
CROSS SECTION

80-HG-NAT



03/01/74

TOTAL
CROSS SECTION

80-HG-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
49	844	1.1500- 4	1.1500- 5	1.3600+ 1	52	81	1.4000+ 1	5.3610+ 0	1.1000- 1
49	844	3.0000- 4	3.0000- 5	1.3200+ 1	45	307	2.5400+ 1	5.2500+ 0	5.2500- 1
46	259	1.0000- 3	5.0000- 4	8.0010+ 0	61	233	2.8400+ 1	5.2310+ 0	5.0000- 2
60	576	4.1000+ 0	1.0000- 1	6.8000+ 0	1.0000- 0	4.5100+ 0	6.0010- 2		

03/01/74

ELASTIC

80-HG-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
51	962	1.9500- 5	1.3300+ 1		64	870	8.0000- 1	5.0000- 2	4.4300+ 0
63	1699	3.0000- 1	2.5000- 2	7.6300+ 0	3.0000- 1	54	103	1.0000+ 0	8.0000- 2
64	670	5.0000- 1	5.0000- 2	5.8400+ 0	2.3000- 1	65	1509	2.0000+ 0	5.0000- 2
63	1750	6.5000- 1	5.5000+ 0	1.5000- 1	60	576	4.1000+ 0	1.0000- 1	4.2000+ 0

03/01/74

N. GAMMA

80-HG-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
60	633	2.4000- 2	2.0000- 3	2.3000- 1
60	639	2.4000- 2	2.0000- 3	3.8000- 1
61	677	3.0000- 2	7.0010- 3	2.9500- 1
63	1	3.0000- 2	8.0010- 3	2.9500- 1
61	677	6.5000- 2	2.0000- 2	1.0300- 1
63	1	6.5000- 2	2.1000- 2	1.0300- 1
58	363	2.0000- 1	1.3300- 1	2.2000- 2
60	633	2.2000- 1	2.0000- 2	1.2600- 1
60	633	8.3000- 1	4.0000- 2	1.0300- 1

03/01/74

NEUTRONS/NONELASTIC EVENT

80-HG-NAT

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
58	877	1.4000+ 1	1.8600+ 0	2.0000- 1

03/01/74

N, GAMMA
CROSS SECTION

80-HG-196

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
62 2656	2.5300- 8		3.6000+ 1	6.0000+ 0

03/01/74

N, GAMMA
CROSS SECTION

80-HG-202

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
57 305	2.4000- 2	5.0000- 3	5.7010- 2	1.3000- 2
59 526	1.9500- 1	1.5000- 2	3.2000- 2	5.0000- 3

03/01/74

N, GAMMA
CROSS SECTION

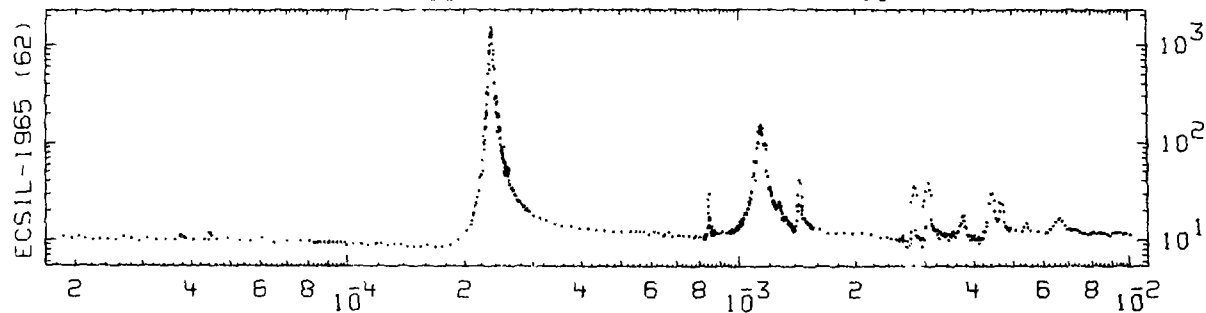
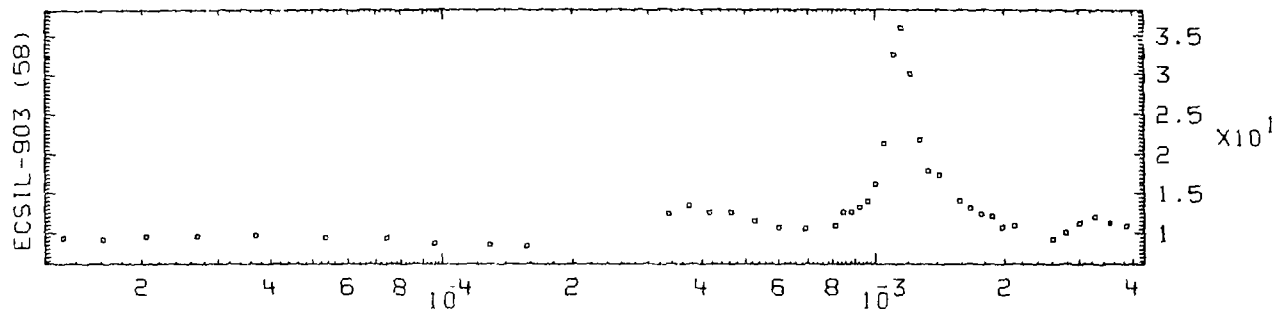
80-HG-204

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
47 888	2.5300- 8		3.4000- 1	6.8000- 2
66 1788	2.4000- 2		6.5000- 3	1.0000- 3
66 1788	2.4000- 2		1.9000- 1	4.5000- 2

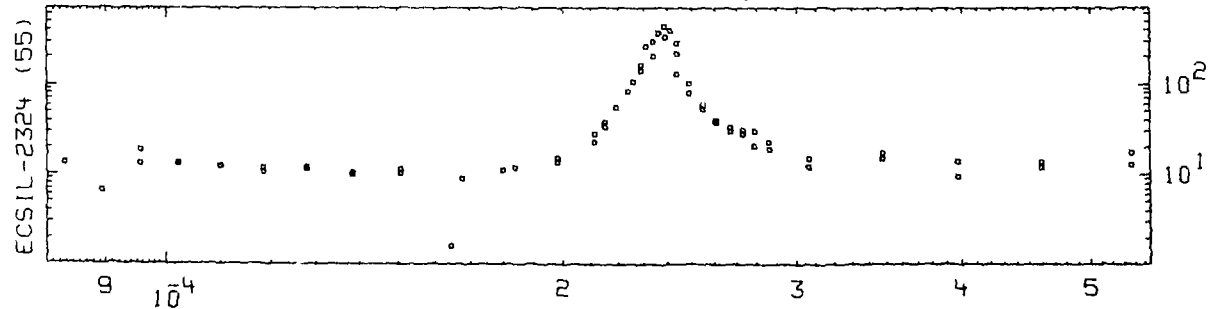
03/01/74

TOTAL CROSS SECTION

81-TL-NAT



BARNs



MEV

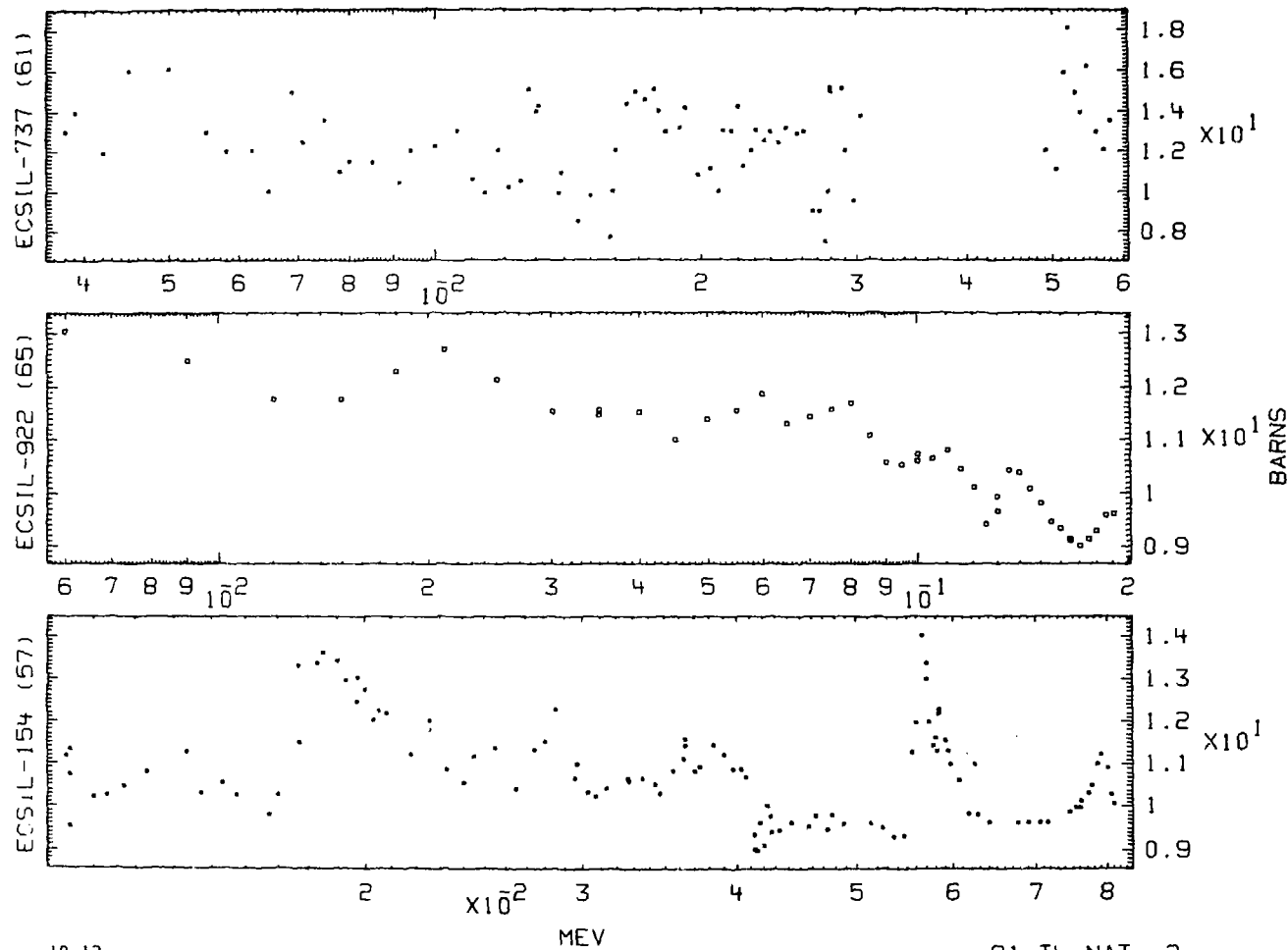
10-11

81-TL-NAT -1

03/01/74

TOTAL
CROSS SECTION

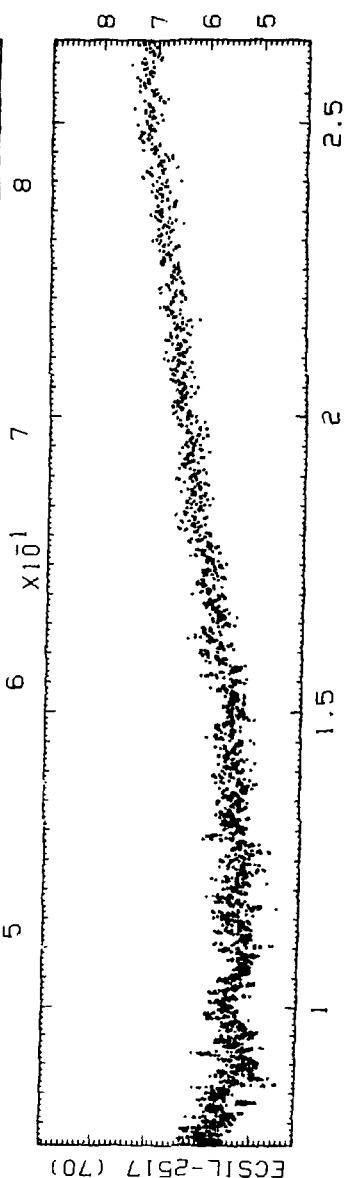
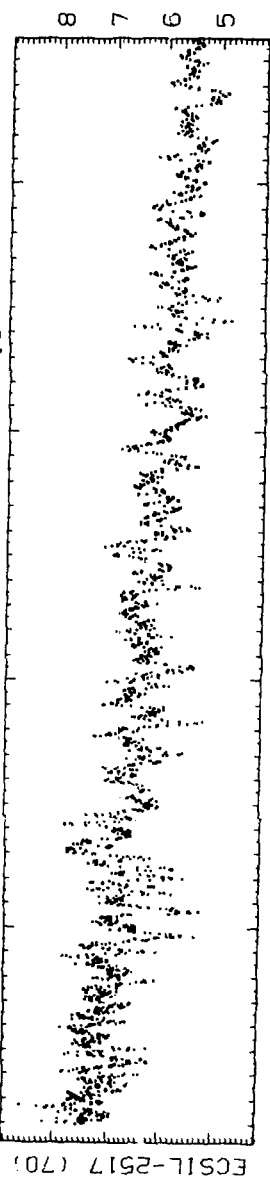
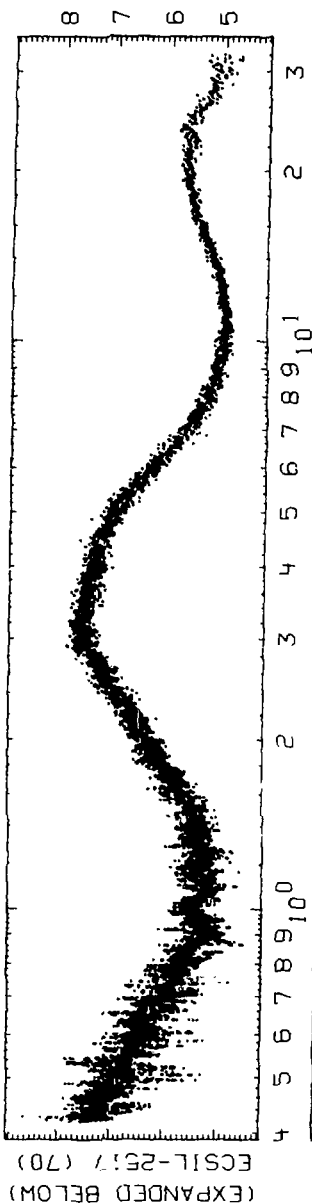
81-TL-NAT



03/01/74

TOTAL
CROSS SECTION

81-TL-NAT



10-13

MEV

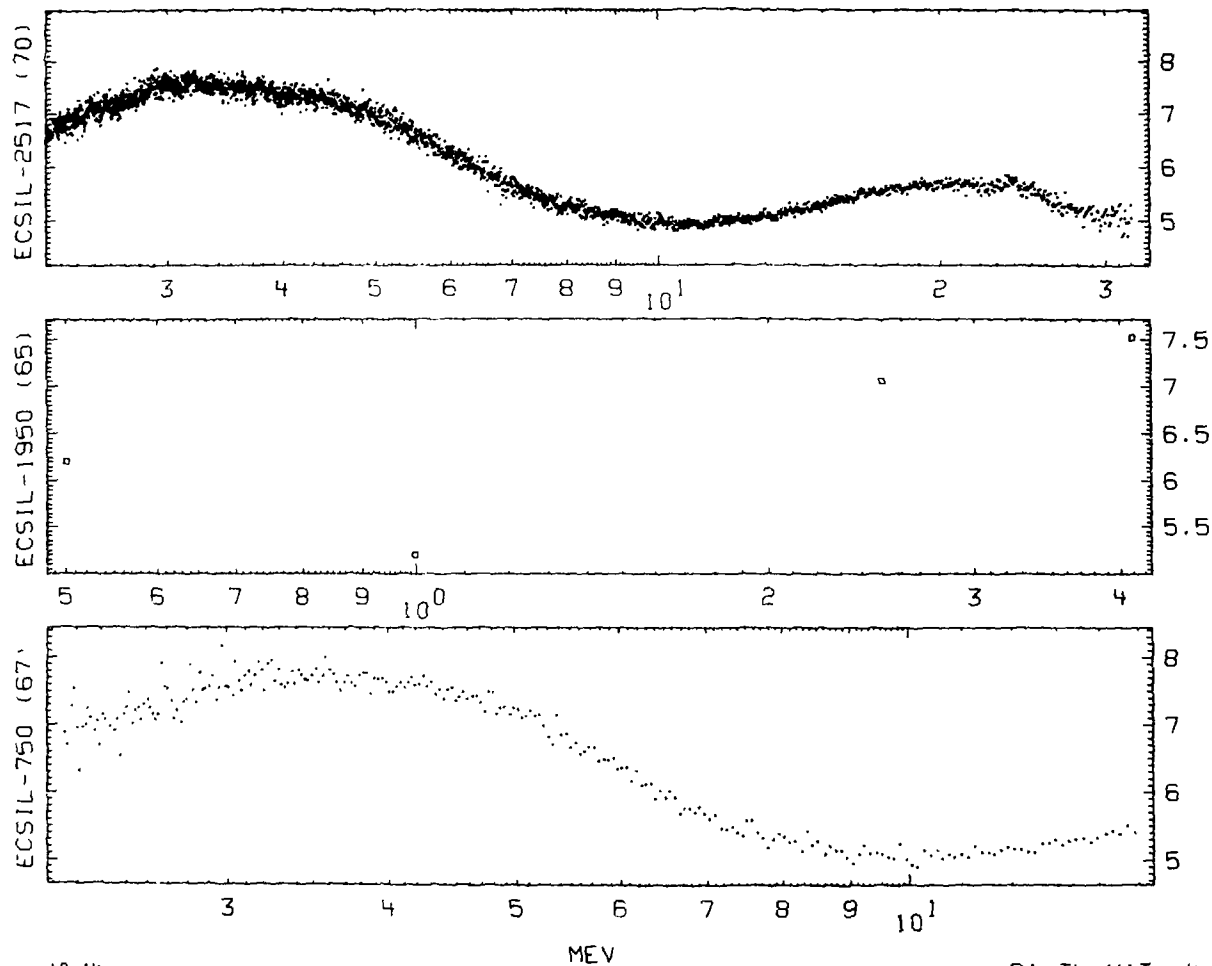
81-TL-NAT -3

BARNs

03/01/74

TOTAL
CROSS SECTION

81-TL-NAT



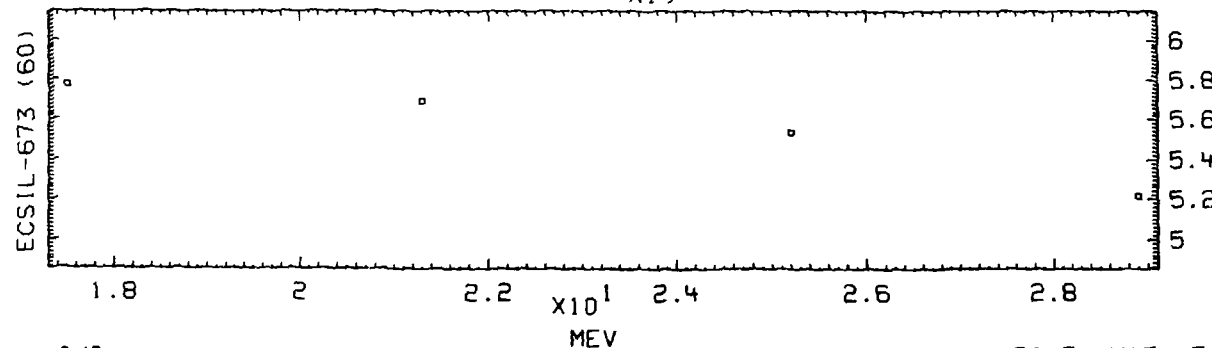
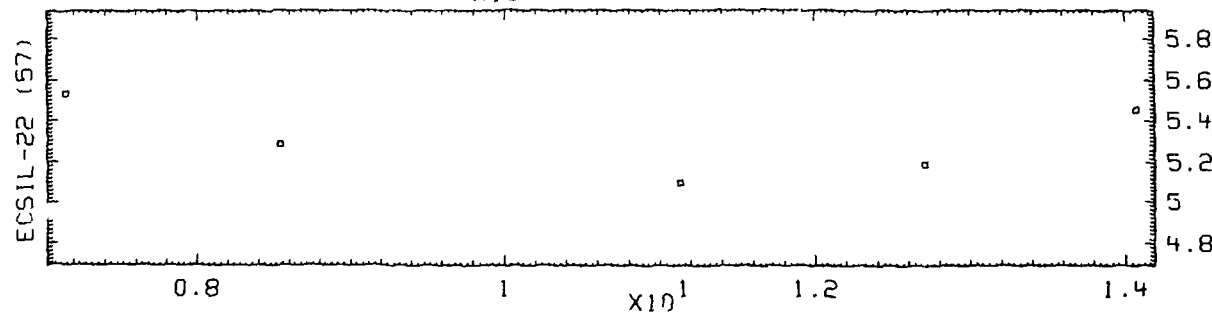
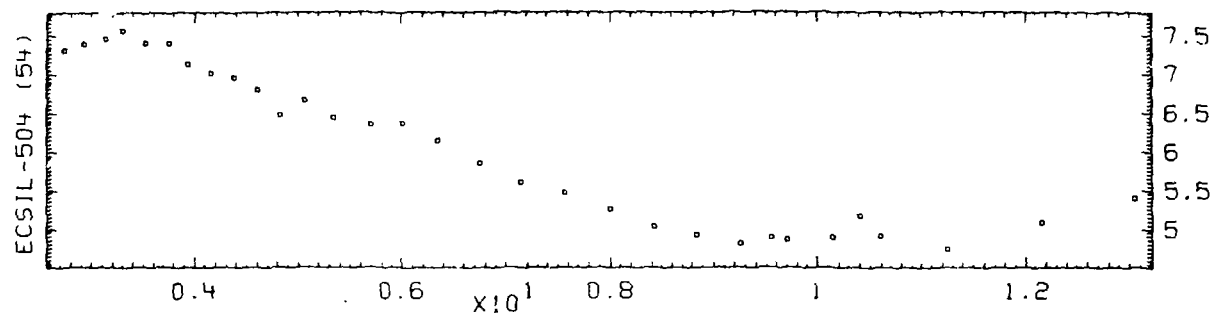
10-14

81-TL-NAT -4

03/01/74

TOTAL
CROSS SECTION

81-TL-NAT



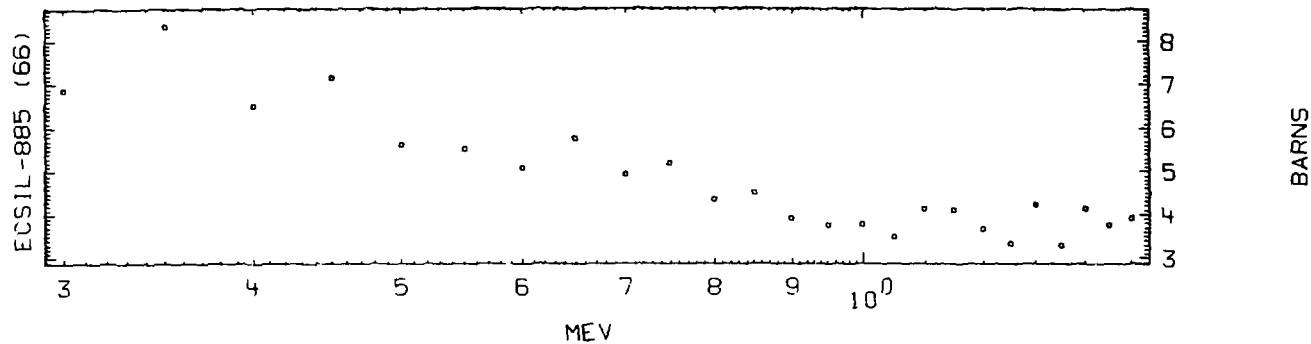
10-15

81-TL-NAT -5

03/01/74

ELASTIC
CROSS SECTION

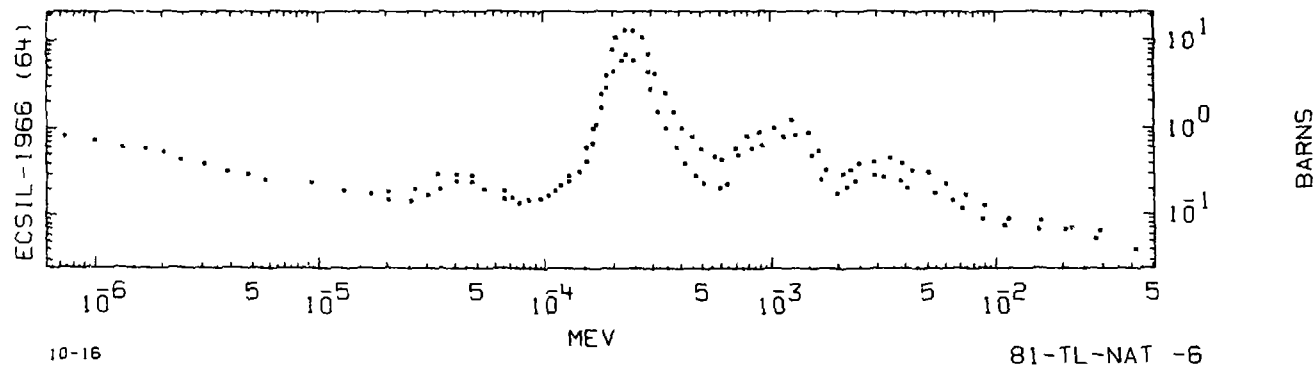
81-TL-NAT



03/01/74

N, GAMMA
CROSS SECTION

81-TL-NAT



03/01/74

TOTAL
CROSS SECTION

81-TL-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
49 844	1.1500- 4	1.1500- 5	9.5210+ 0	
49 844	3.0000- 4	3.0000- 5	1.1700+ 1	
52 81	1.4000+ 1		5.3610+ 0	1.1000- 1
58 975	1.5000+ 1		5.2400+ 0	4.6000- 1
55 133	1.5000+ 1		5.2400+ 0	4.6000- 1
58 975	1.6200+ 1		5.4000+ 0	2.4000- 1
55 133	1.6200+ 1		5.4000+ 0	2.4000- 1

03/01/74

FISSION

81-TL-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
55 461	3.8000+ 2		1.9000- 2	

03/01/74

N, GAMMA

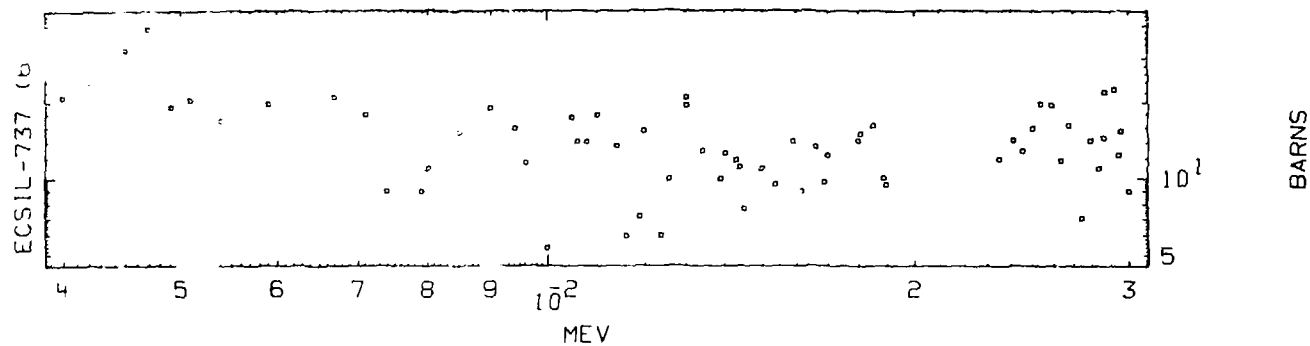
81-TL-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
61 677	3.0000- 2	7.0010- 3	7.1010- 2	7.0010- 3
63 1	3.0000- 2	8.0010- 3	7.1010- 2	6.4010- 3
63 1	6.5000- 2	2.1000- 2	3.5000- 2	3.2000- 3
61 677	6.5000- 2	2.0000- 2	3.5000- 2	3.0000- 3

03/01/74

TOTAL
CROSS SECTION

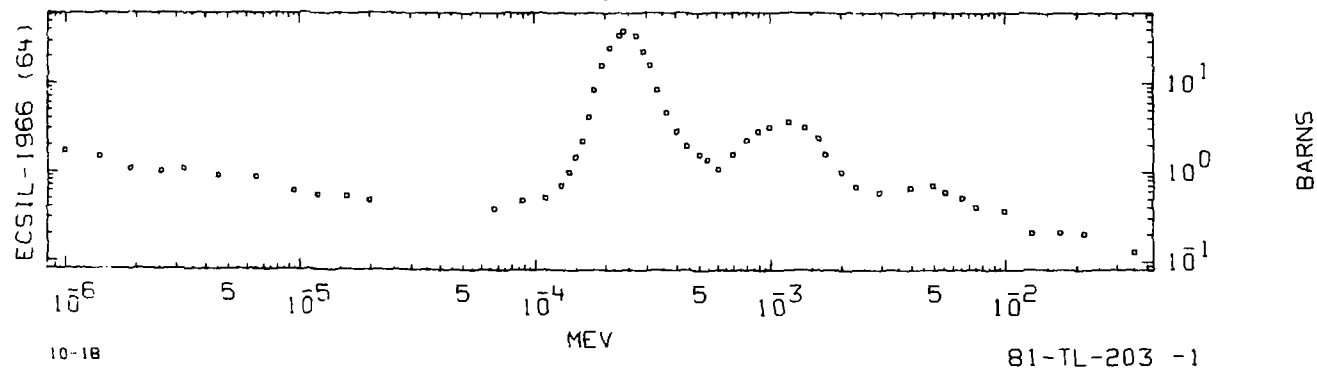
81-TL-203



03/01/74

N, GAMMA
CROSS SECTION

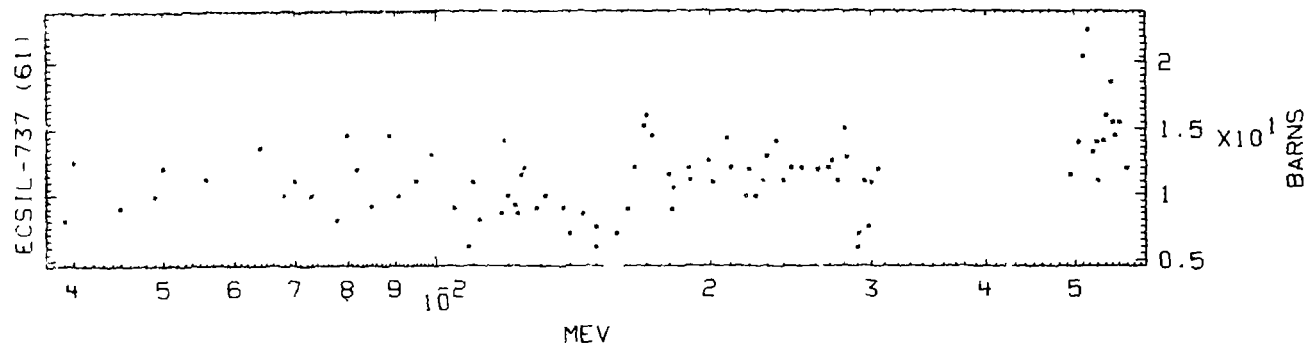
81-TL-203



03/01/74

TOTAL
CROSS SECTION

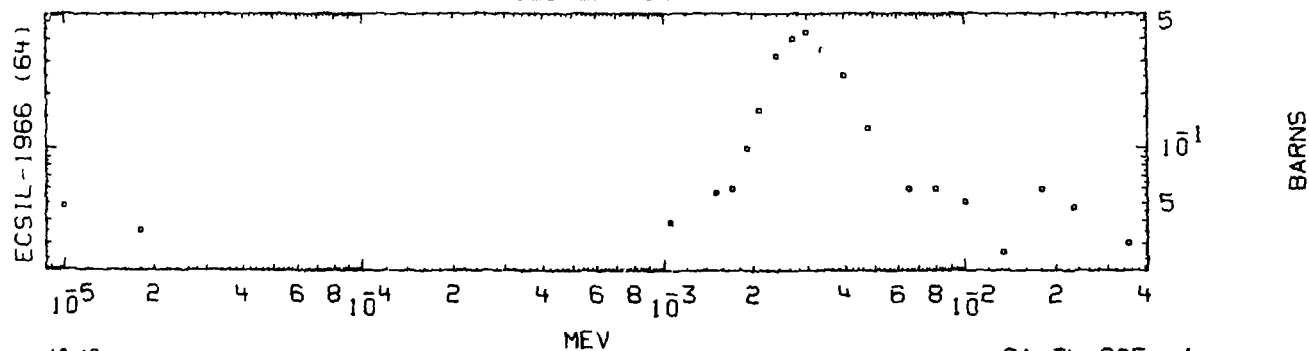
81-TL-205



03/01/74

N. GAMMA
CROSS SECTION

81-TL-205



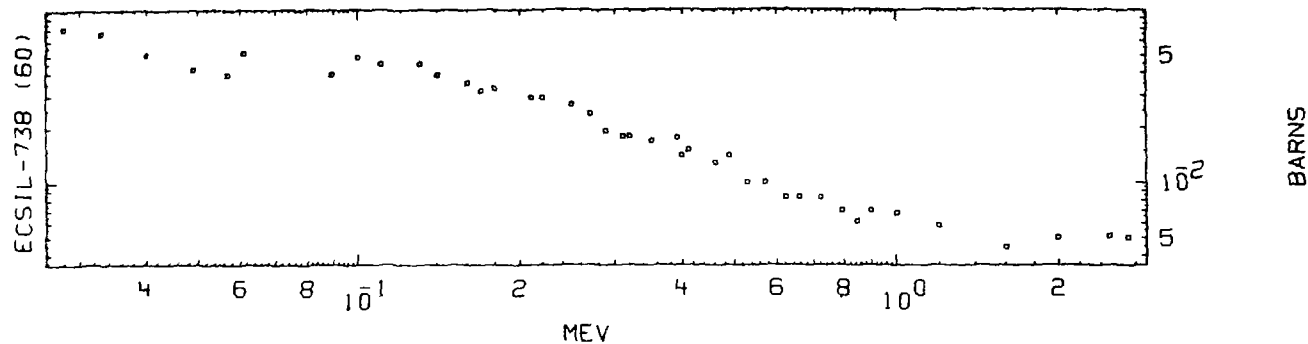
10-19

81-TL-205 -1

03/01/74

N, GAMMA
CROSS SECTION

81-TL-205



03/01/74

N, GAMMA

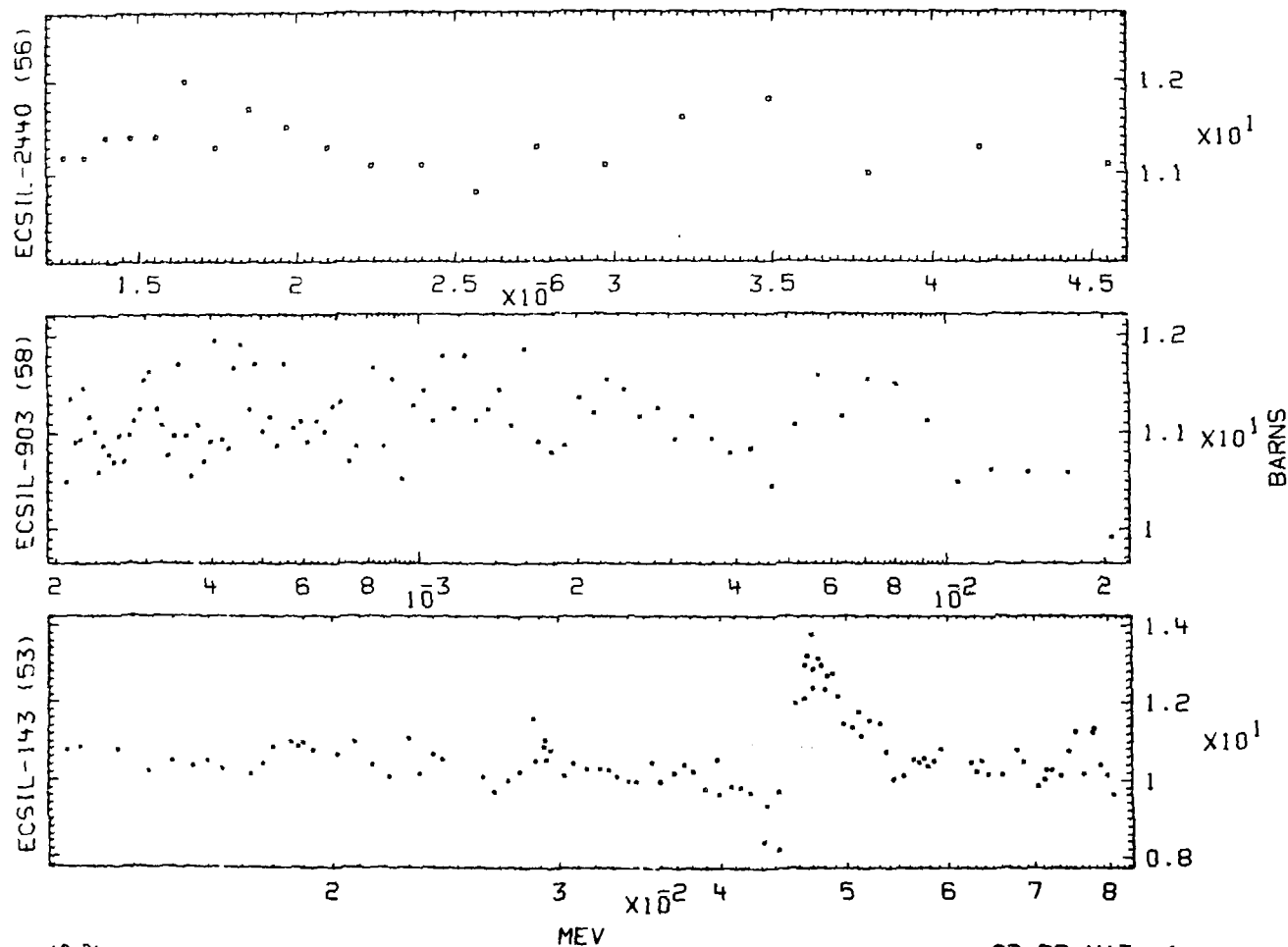
81-TL-205

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
58 43	2.1000- 2	4.0000- 3	5.0000- 2	2.0000- 3
68 2856	2.4000- 2		3.0000- 2	8.0000- 3
58 1044	2.5000+ 0		5.2000- 3	3.0000- 4
58 1044	3.1000+ 0		5.0700- 3	2.0000- 4
58 1044	4.0000+ 0		5.1000- 3	2.0000- 4
57 521	1.4500+ 1		2.0000- 3	4.0000- 4

03/01/74

TOTAL
CROSS SECTION

82-PB-NAT



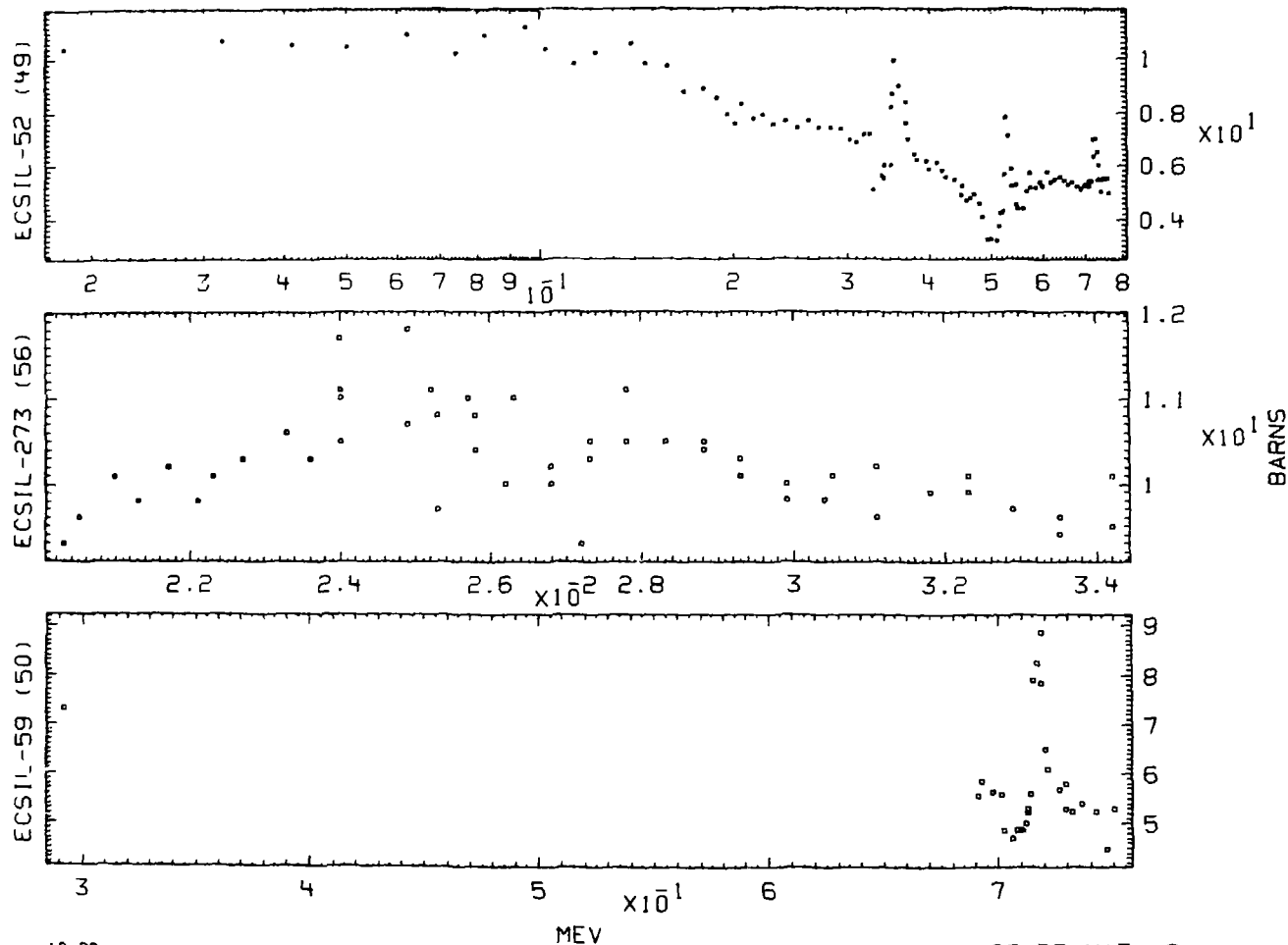
10-21

82-PB-NAT -1

03/01/74

TOTAL
CROSS SECTION

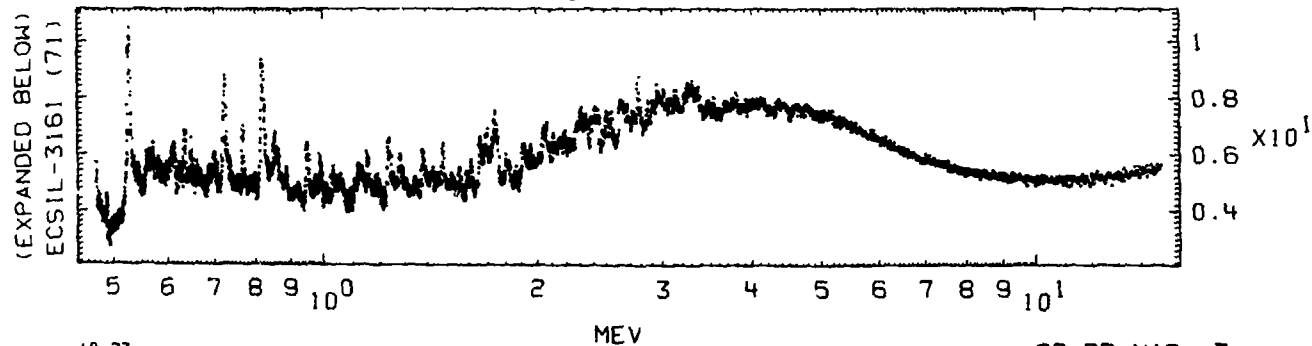
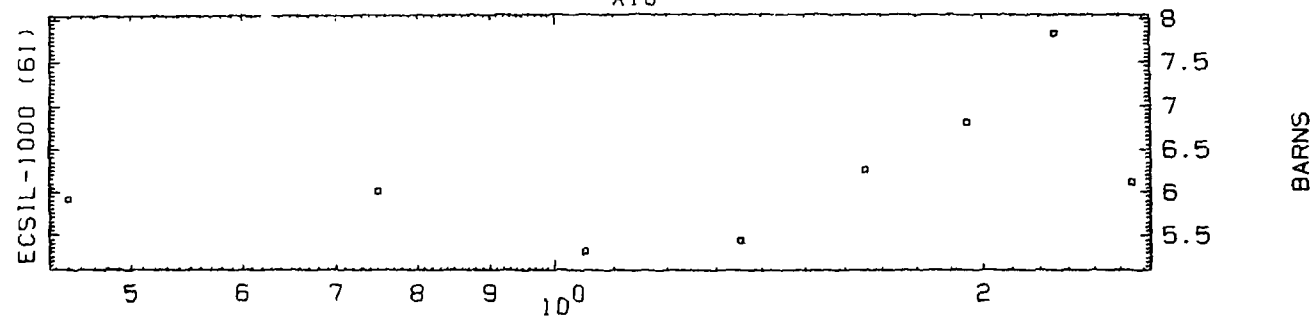
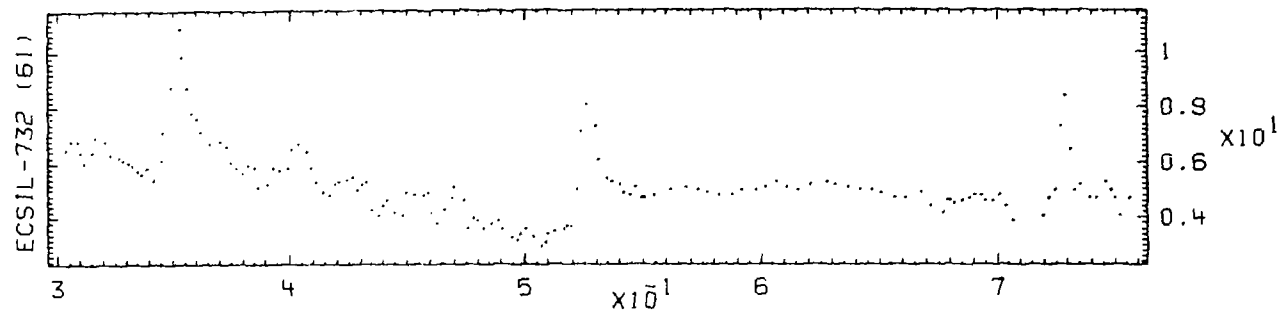
82-PB-NAT



05/01/74

TOTAL
CROSS SECTION

82-PB-NAT



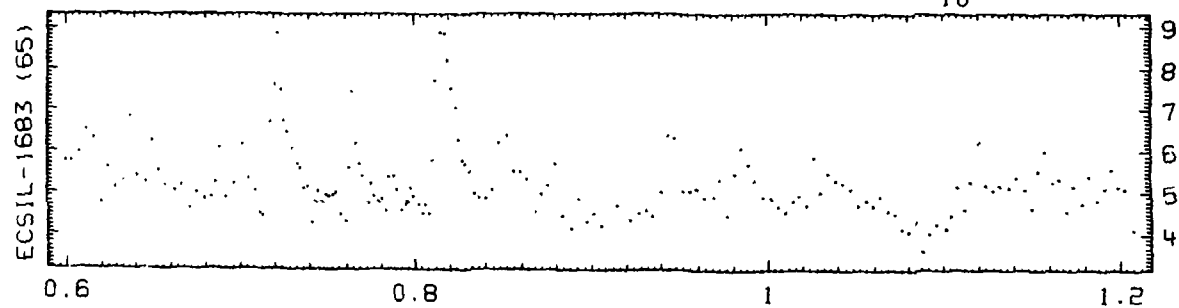
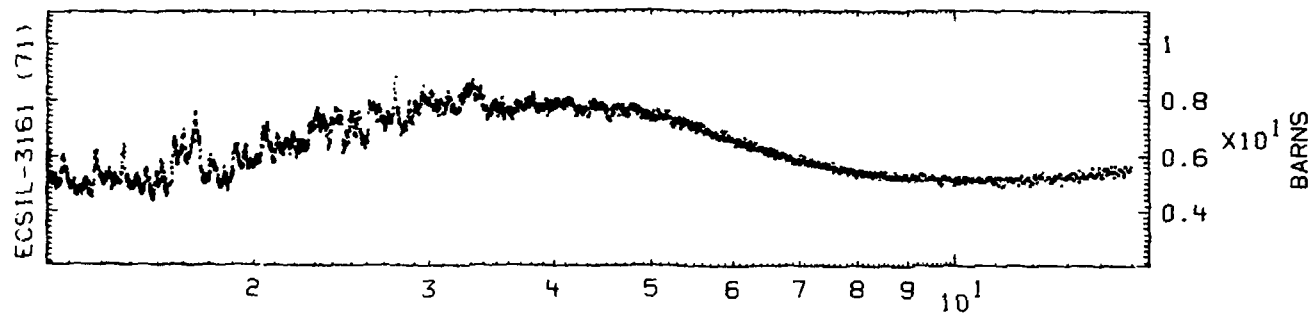
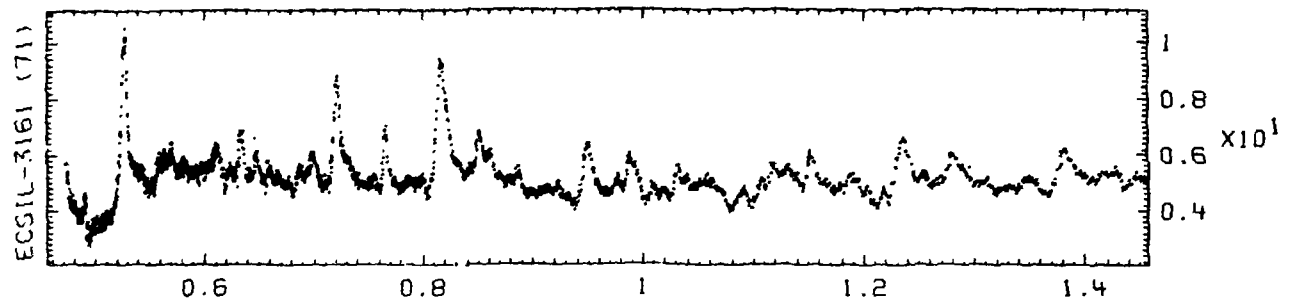
10-23

82-PB-NAT -3

03/01/74

TOTAL
CROSS SECTION

82-PB-NAT



10-24

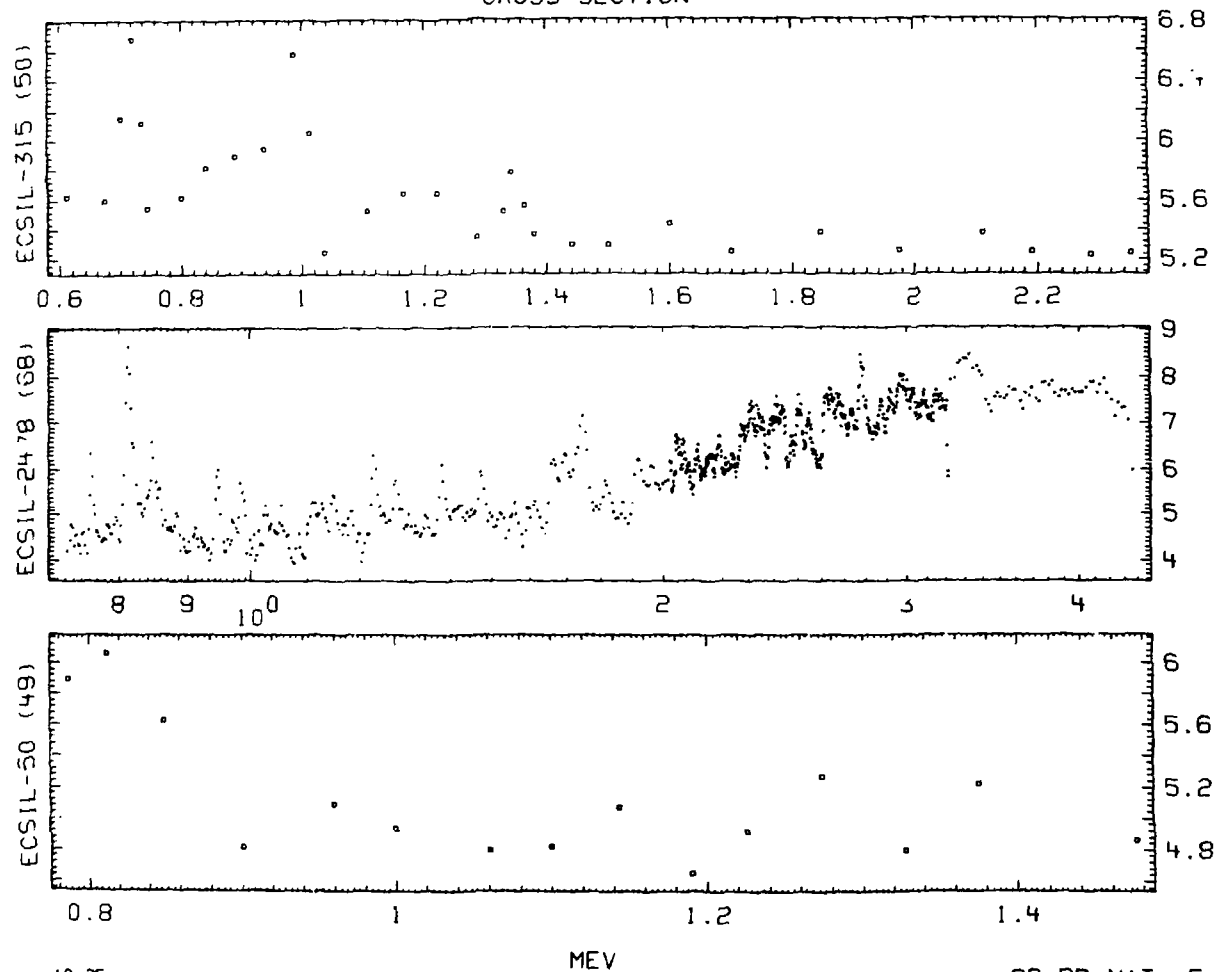
MEV

82-PB-NAT -4

03/01/74

TOTAL
CROSS SECTION

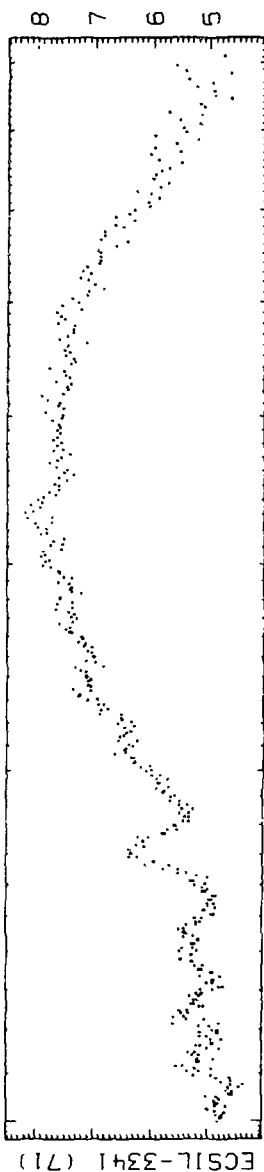
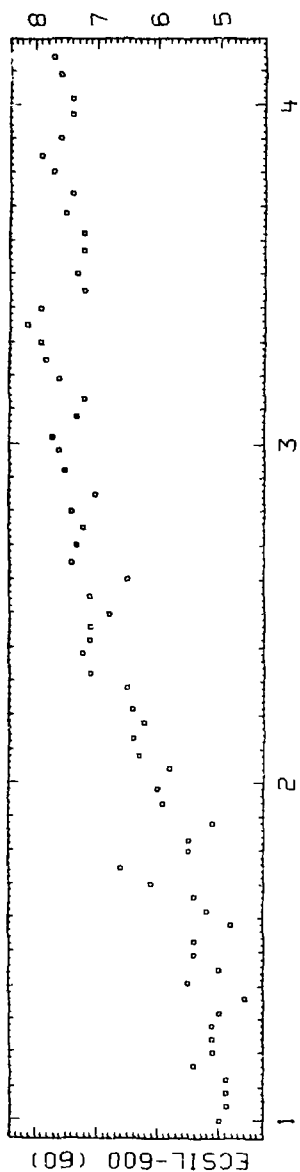
82-PB-NAT



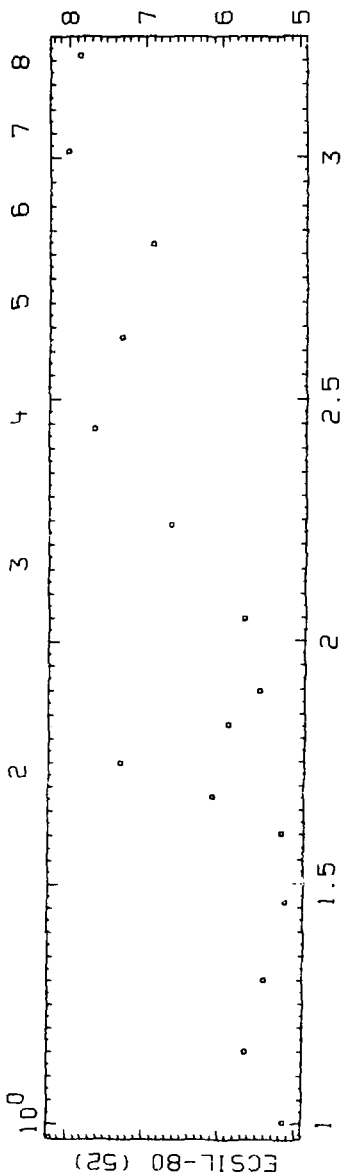
03/01/74

TOTAL
CROSS SECTION

82-PB-NAT



BARNs



10-26

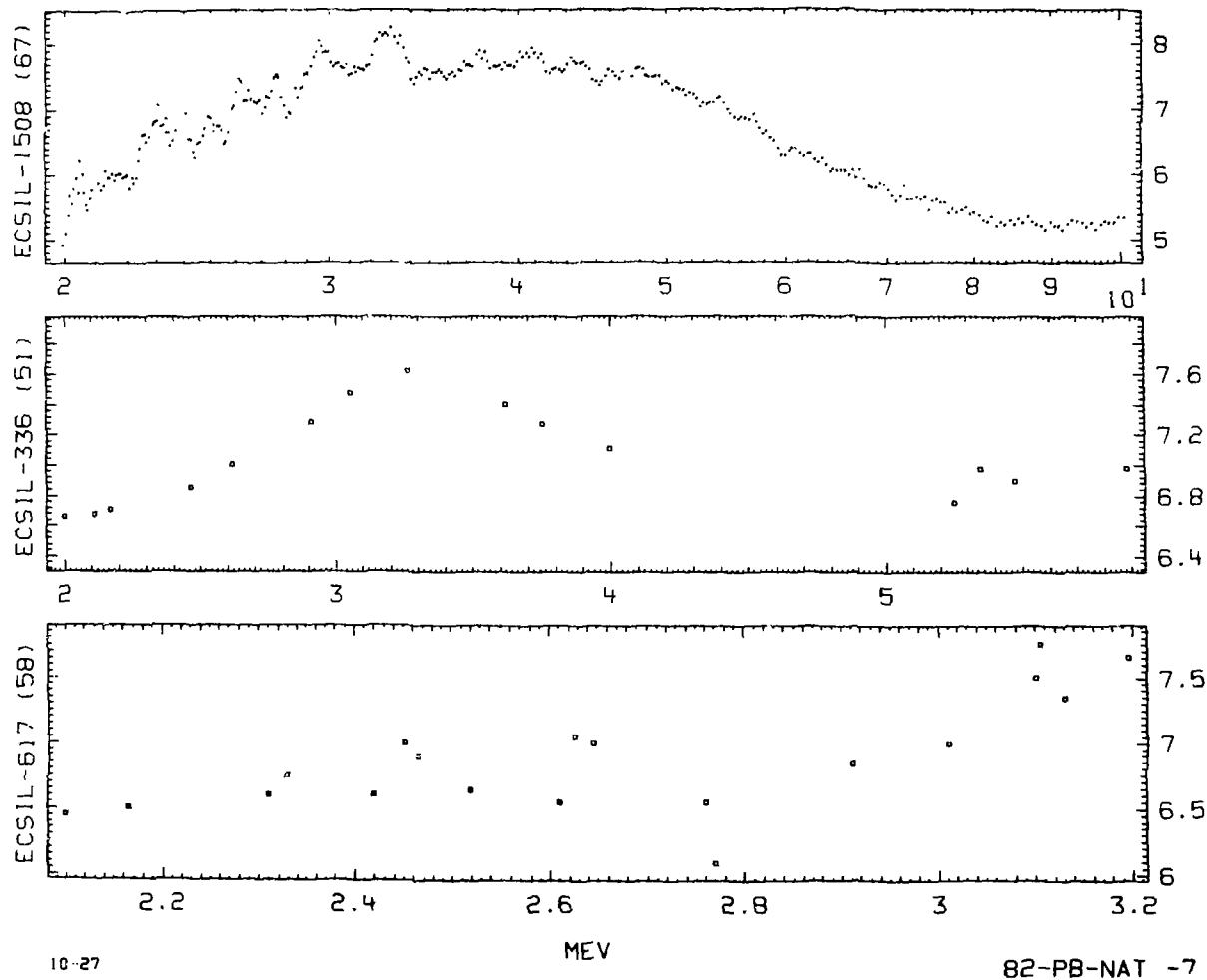
MEV

82-PB-NAT -6

03/01/74

TOTAL
CROSS SECTION

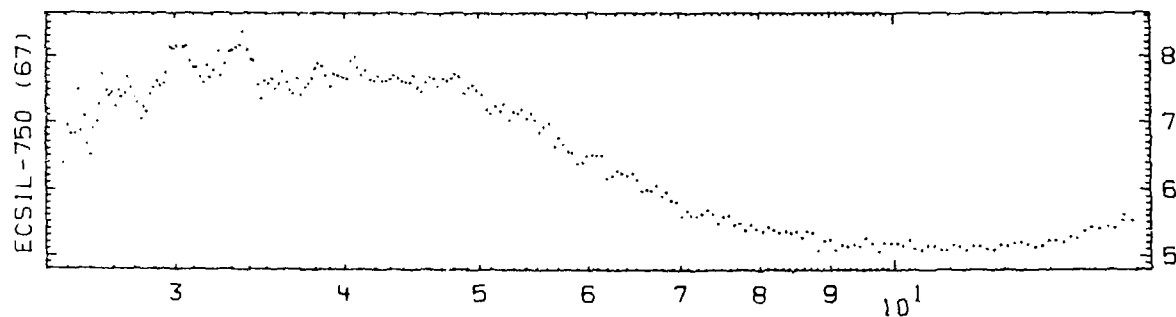
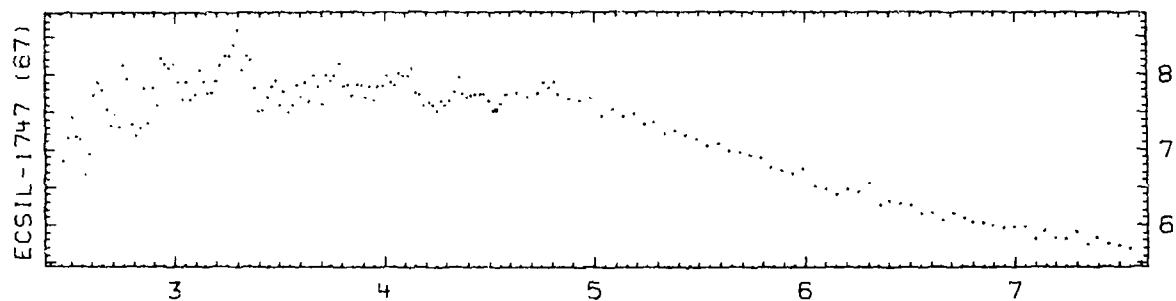
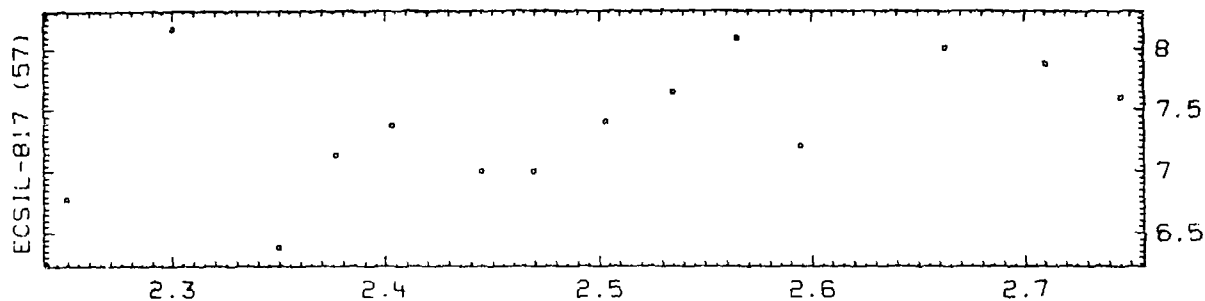
82-PB-NAT



03/01/74

TOTAL
CROSS SECTION

82-PB-NAT

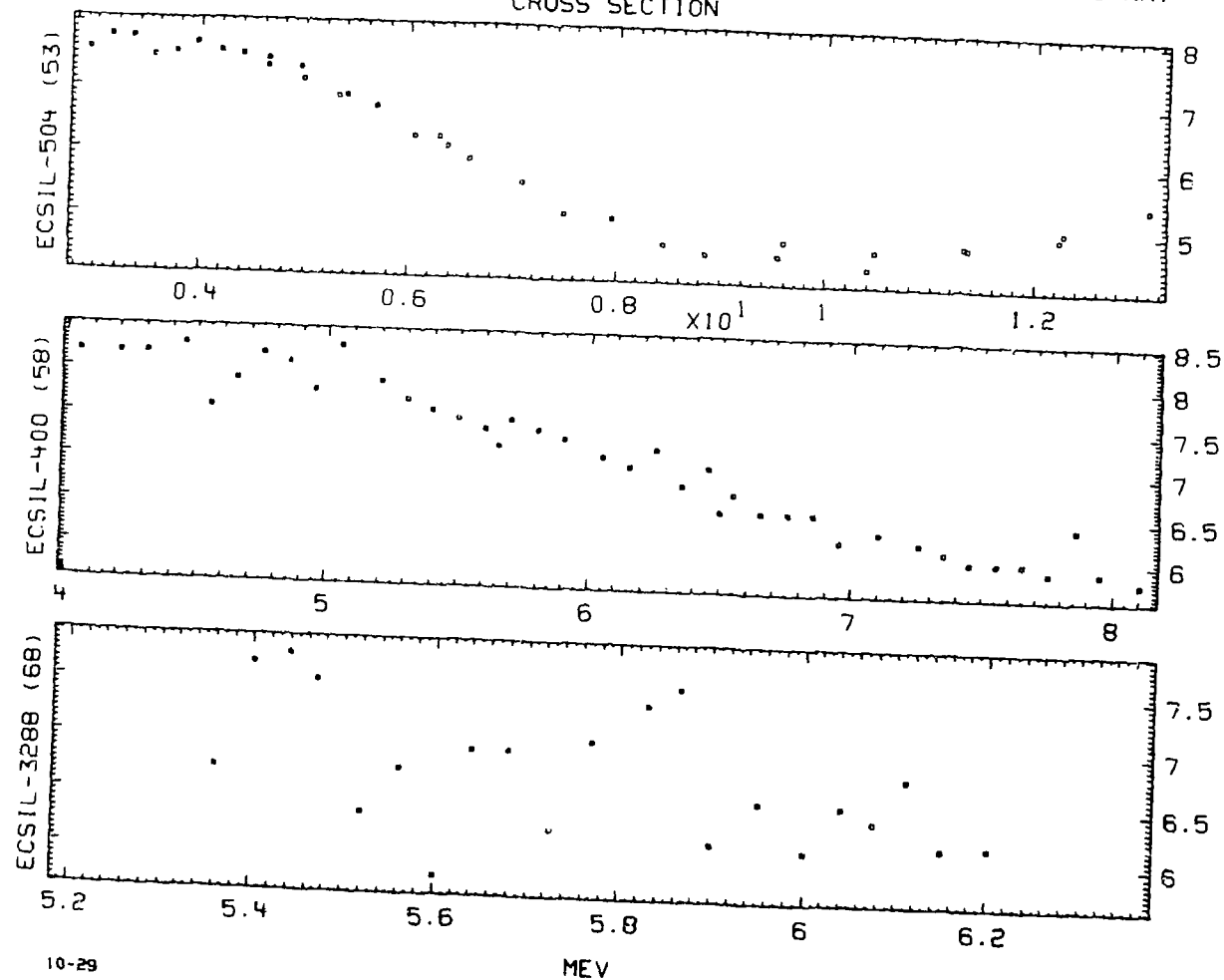


BARNs

03/01/74

TOTAL
CROSS SECTION

82-PB-NAT



10-29

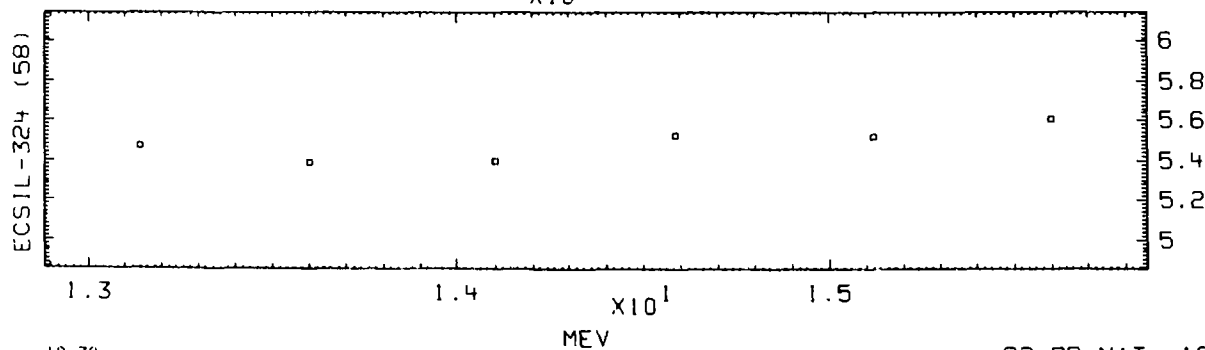
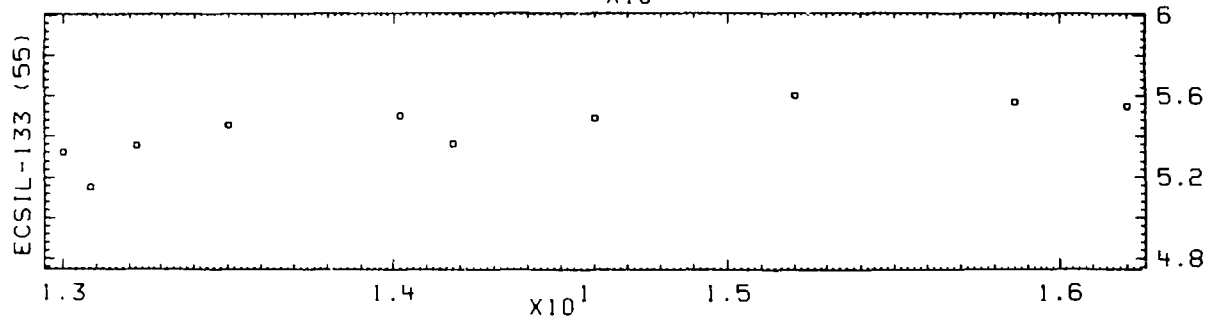
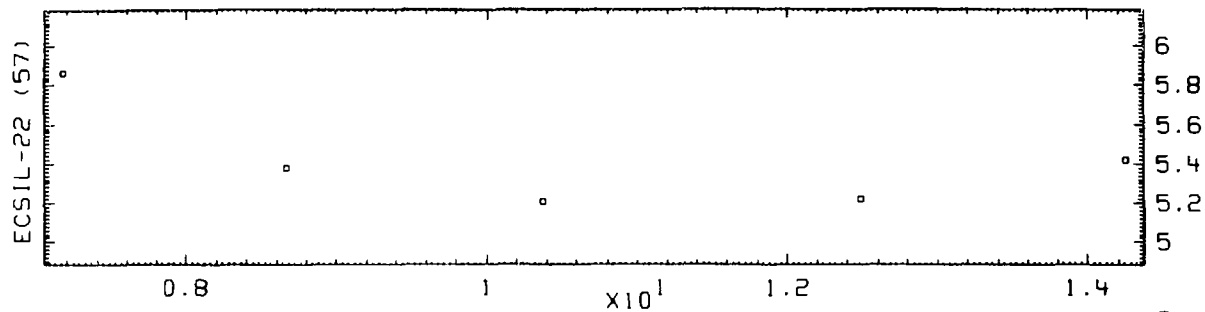
MEV

82-PB-NAT -9

03/01/74

TOTAL
CROSS SECTION

82-PB-NAT

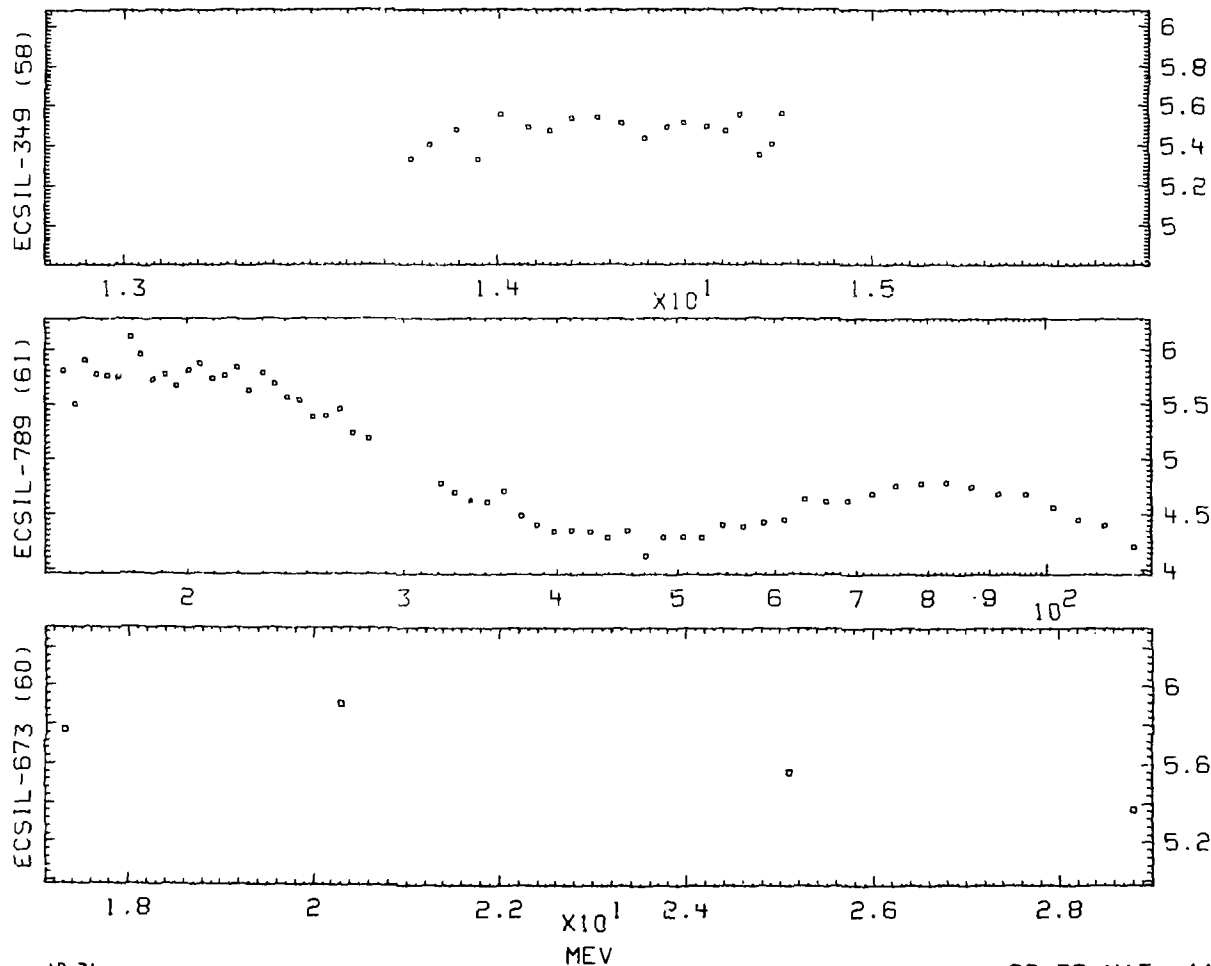


BARNs

03/01/74

TOTAL
CROSS SECTION

82-PB-NAT



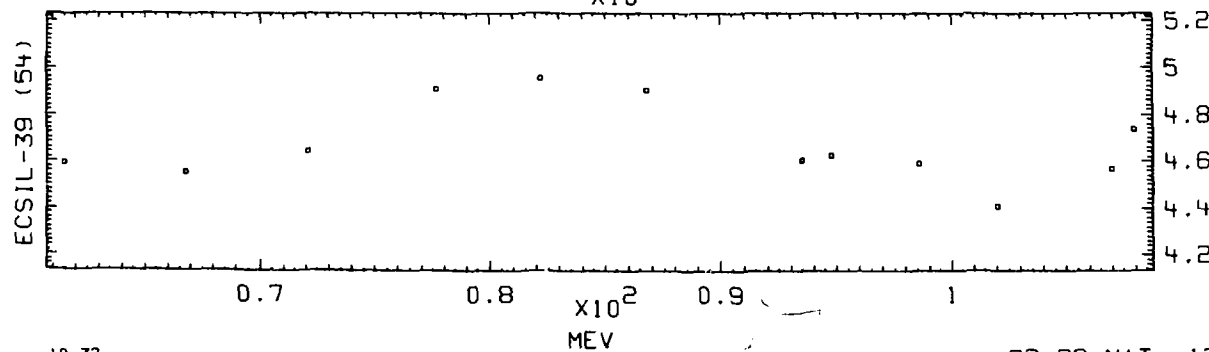
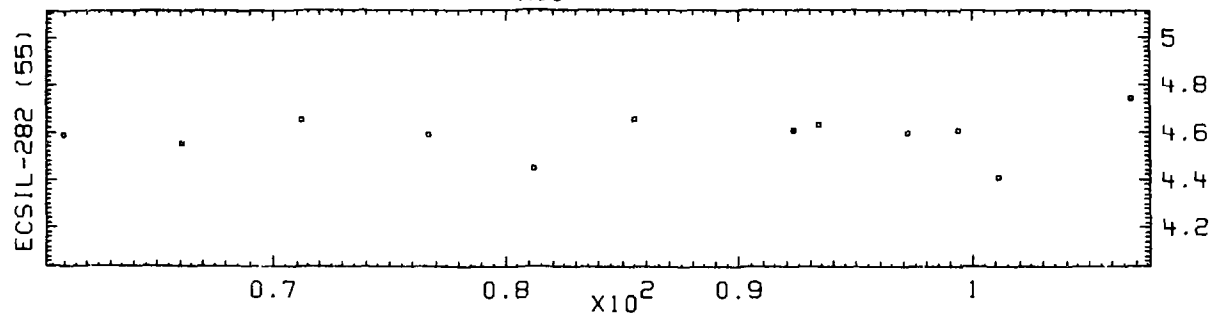
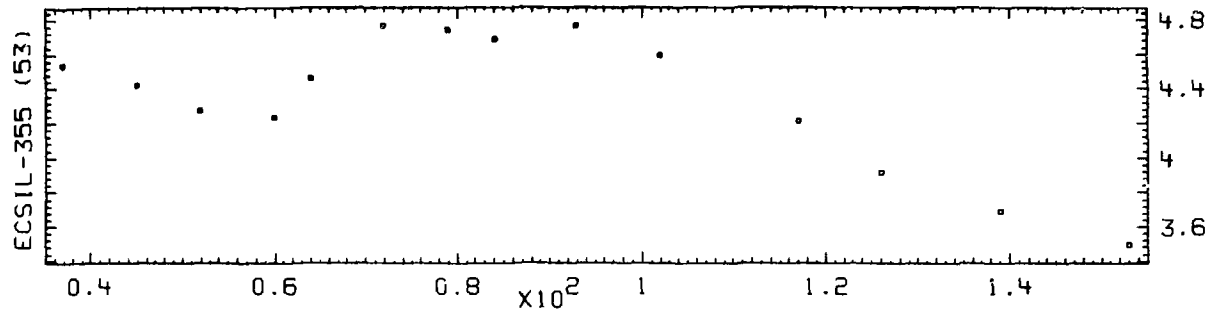
10-31

82-PB-NAT -11

03/01/74

TOTAL
CROSS SECTION

82-PB-NAT

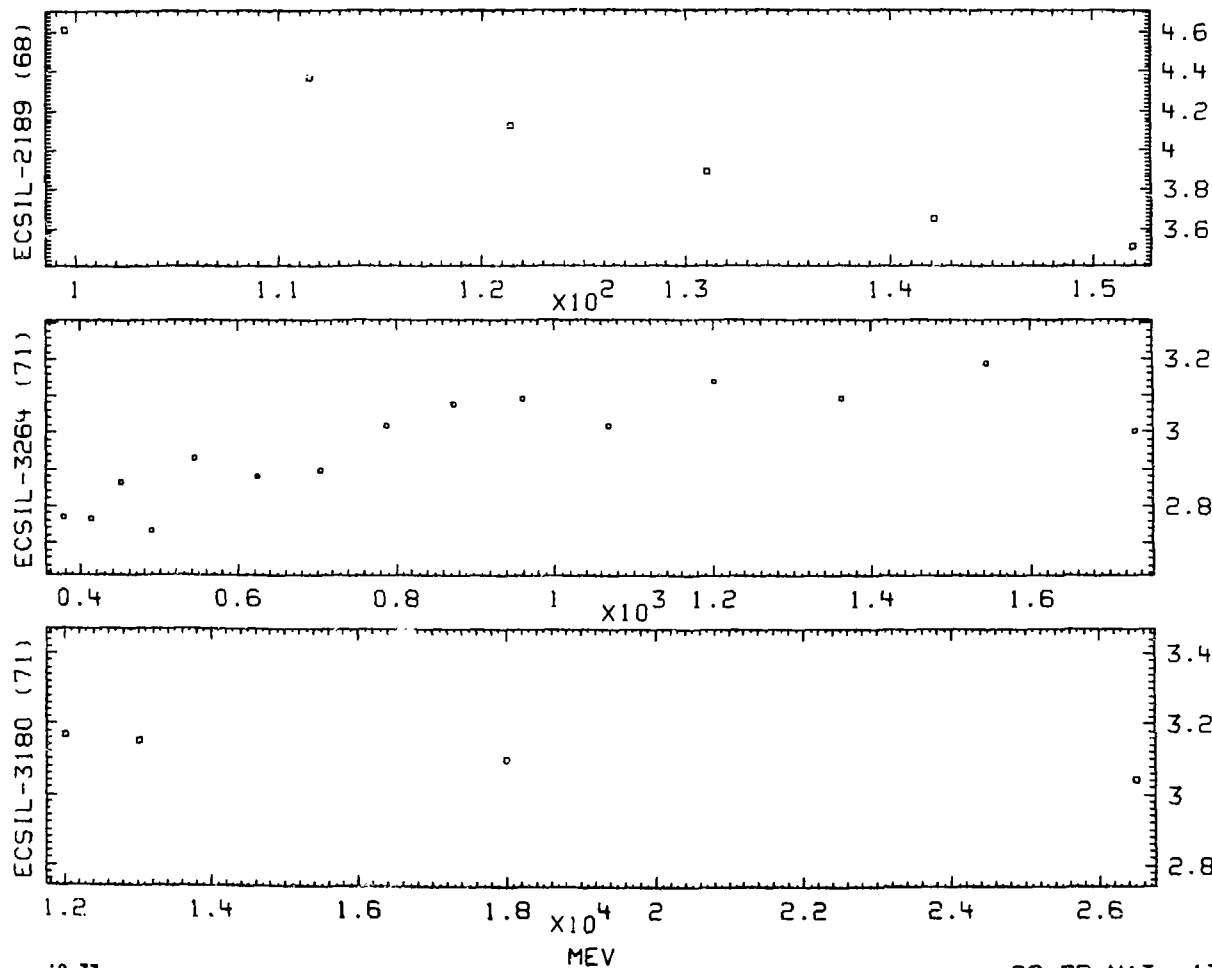


BARNs

03/01/74

TOTAL
CROSS SECTION

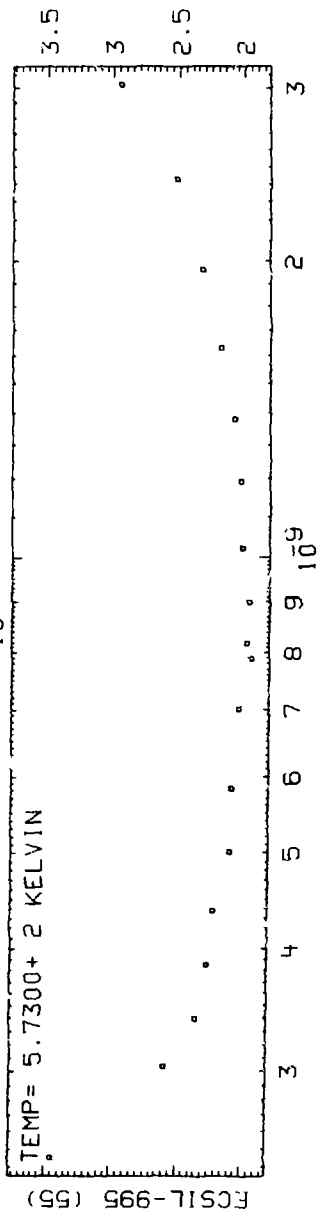
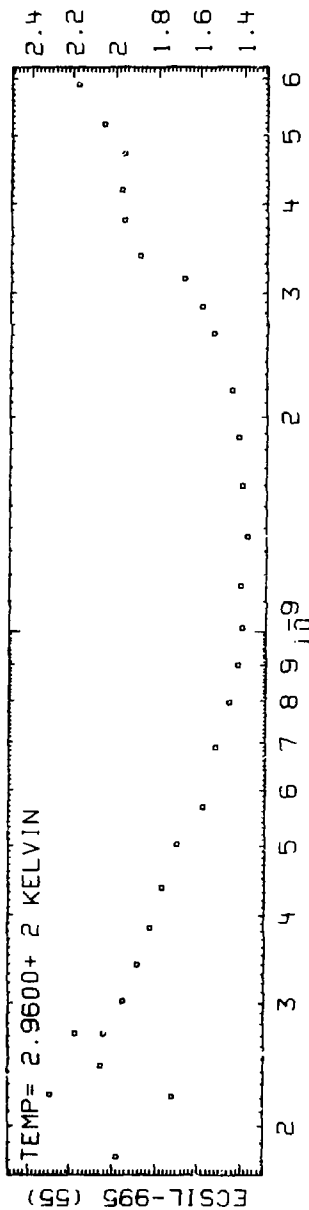
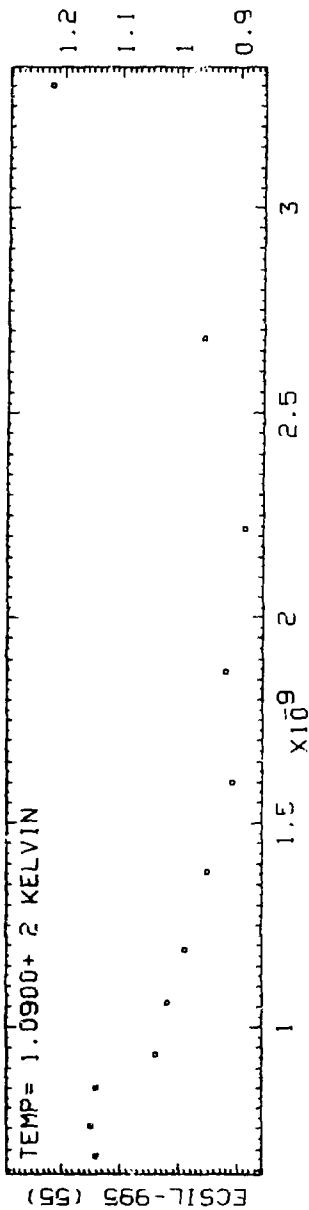
82-PB-NAT



03/01/74

TOTAL
CROSS SECTION

82-PB-NAT



10-34

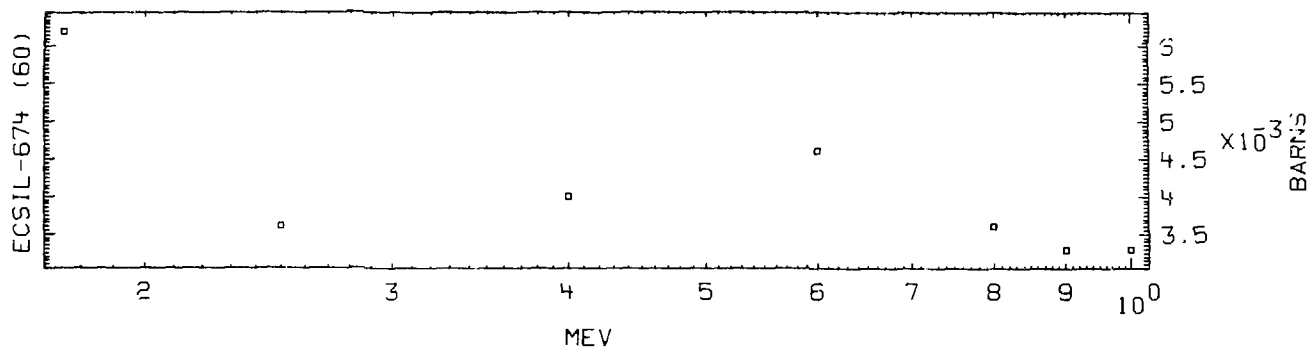
82-PB-NAT -14

BARNs

03/01/74

N, GAMMA
CROSS SECTION

82-PB-NAT



03/01/74

TOTAL

82-PB-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN'S	DELTA BARN'S	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN'S	DELTA BARN'S
65	949	1.4400- 6	1.1310+ 1	6.0000- 2	69	2988	1.4800+ 1	5.1100+ 0	2.5550- 1
49	844	1.1500- 4	1.1500- 5	1.1100+ 1	57	368	1.4800+ 1	5.2810+ 0	1.5000- 1
49	844	3.0000- 4	3.0000- 5	1.0700+ 1	53	274	1.9000+ 1	3.3000- 1	5.9610+ 0
41	170	9.0000- 1	6.8300+ 0	4.0000- 1	50	291	4.2000+ 1	1.0000+ 0	4.4400+ 0
53	297	3.7000+ 0	2.0000- 1	7.6010+ 0	54	343	4.7500- 1	2.0000+ 0	4.4600+ 0
67	1643	4.0000+ 0	5.0000- 2	7.4900+ 0	54	343	8.8000+ 1	2.0000+ 0	4.3800+ 0
55	295	4.1000+ 0	4.0000- 2	7.8010+ 0	49	286	9.0000+ 1	4.5300+ 0	9.0010- 2
69	2025	6.9400+ 0	5.0000- 1	7.3900+ 0	50	12	9.5000+ 1	4.4800+ 0	3.0000- 2
55	116	1.2800+ 1	5.2010+ 0		55	2056	1.4000+ 3	2.0000+ 2	3.2100+ 0
51	65	1.3900+ 1	1.0000+ 0	4.9700+ 0	70	3195	3.6000+ 3	3.0710+ 0	7.9000- 2
63	766	1.3980+ 1	5.0000- 2	5.2700+ 0	61	1556	5.0000+ 3	4.0000+ 2	2.5340+ 0
62	1740	1.4000+ 1	5.4000+ 0	3.0000- 2	69	3160	5.7000+ 3	6.0000+ 2	3.2400+ 0
52	207	1.4000+ 1	5.1010+ 0	4.0000- 1	62	1657	8.3000+ 3	2.5560+ 0	1.0000- 1
52	81	1.4000+ 1	5.4810+ 0	1.1000- 1	68	2350	2.7000+ 4	2.6300+ 0	1.2000- 1

03/01/74

ELASTIC
CROSS SECTION

82-PB-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
50 596	2.2000- 1		8.7910+ 0	
64 2338	3.0000- 1	2.5000- 2	6.7800+ 0	4.5000- 1
64 970	5.0000- 1	5.0000- 2	5.8900+ 0	2.2000- 1
63 1750	6.5000- 1		5.8500+ 0	1.6000- 1
64 870	8.0000- 1	5.0000- 2	5.8500+ 0	1.7000- 1
54 103	1.0000+ 0	8.0000- 2	4.7000+ 0	7.0500- 1
54 103	1.0000+ 0	8.0000- 2	4.6000+ 0	6.9000- 1
59 1719	3.6700+ 0	1.2000- 1	4.8000+ 0	4.0000- 1
64 1643	4.0000+ 0	5.0000- 2	5.7000+ 0	4.0000- 1
59 1719	4.2100+ 0	1.0000- 1	5.2000+ 0	5.0000- 1
59 1719	4.7000+ 0	9.0000- 2	5.4000+ 0	5.0000- 1
56 21	1.0000+ 1		2.0200+ 0	
58 403	1.4500+ 1		2.8300+ 0	1.4000- 1

03/01/74

N, GAMMA

82-PB-NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
60 639	2.4000- 2	2.0000- 3	3.0000- 3	9.0010- 3
61 677	3.0000- 2	7.0010- 3	3.0000- 3	3.0000- 3
63 1	3.0000- 2	8.0010- 3	3.0000- 3	4.0000- 3
61 677	6.5000- 2	2.0000- 2	1.0000- 3	2.0000- 3
63 1	6.5000- 2	2.1000- 2	1.0000- 3	3.0000- 3

03/01/74

NEUTRONS/NONELASTIC EVENT

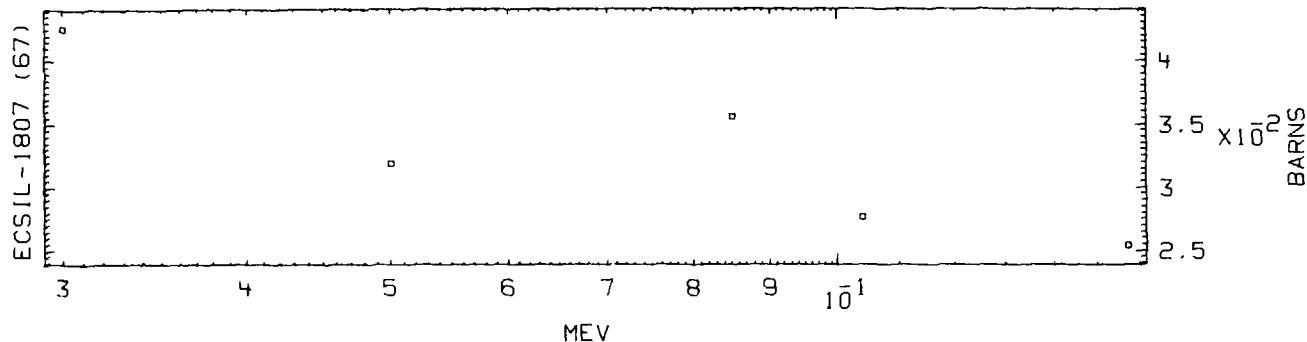
82-PB-NAT

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
58 877	1.4000+ 1		1.9200+ 0	2.0000- 1

03/01/74

N, GAMMA
CROSS SECTION

82-PB-204



03/01/74

TOTAL

82-PB-204

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
67 1869	1.4200+ 1		5.4300+ 0	6.0000- 2

03/01/74

N, GAMMA

82-PB-204

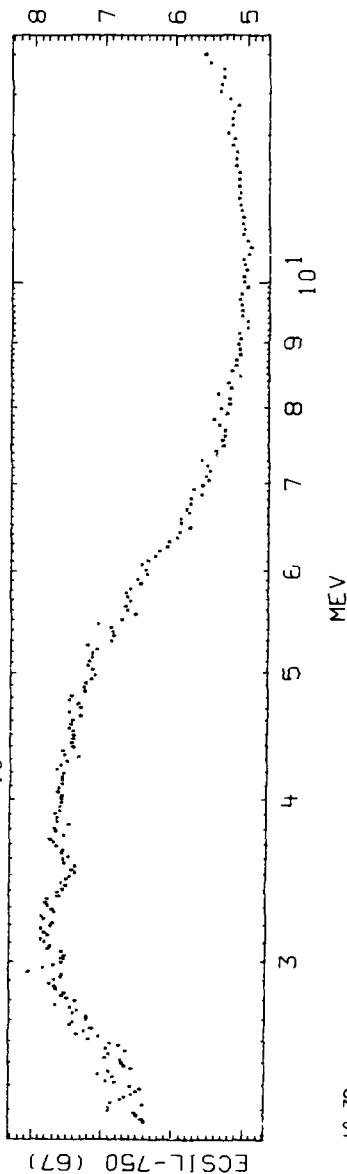
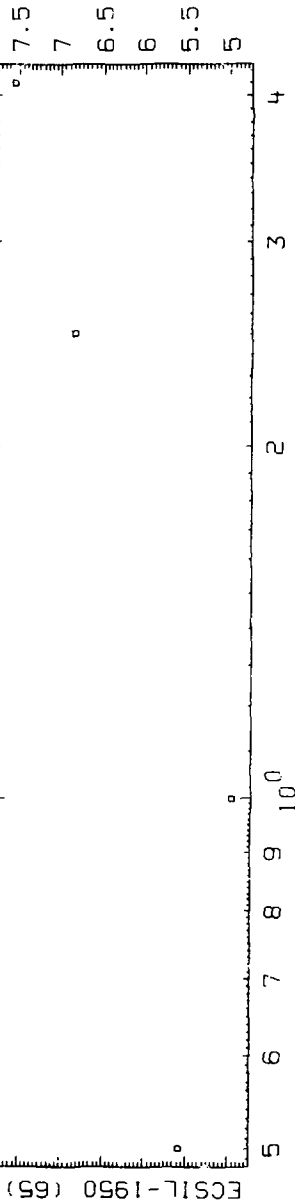
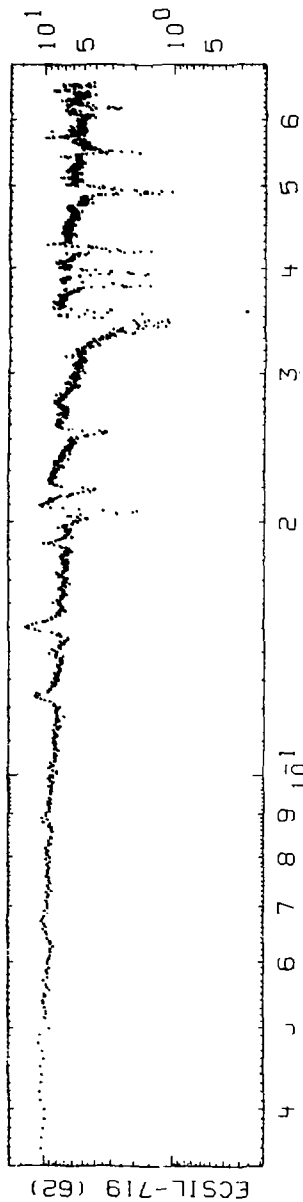
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
71 3220	1.9500- 3	7.0000- 4	1.8000+ 0	5.0000- 1

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	E-PHOTON MEV
71 3220	1.9500- 3	7.0000- 4	1.0000- 2	1.0000- 2	4.6158+ 0
71 3220	1.9500- 3	7.0000- 4	1.0000- 1	1.0000- 2	4.8151+ 0
71 3220	1.9500- 3	7.0000- 4	2.0000- 1	2.0000- 2	4.9853+ 0
71 3220	1.9500- 3	7.0000- 4	1.5000- 1	4.0000- 1	5.1158+ 0
71 3220	1.9500- 3	7.0000- 4	1.3000- 1	2.0000- 2	5.9292+ 0
71 3220	1.9500- 3	7.0000- 4	2.6000- 1	5.0000- 2	6.1572+ 0
71 3220	1.9500- 3	7.0000- 4	4.0000- 2	1.0000- 2	6.4716+ 0
71 3220	1.9500- 3	7.0000- 4	4.5000- 1	5.0000- 2	6.7312+ 0

03/01/74

82-PB-206

TOTAL
CROSS SECTION



BARNs

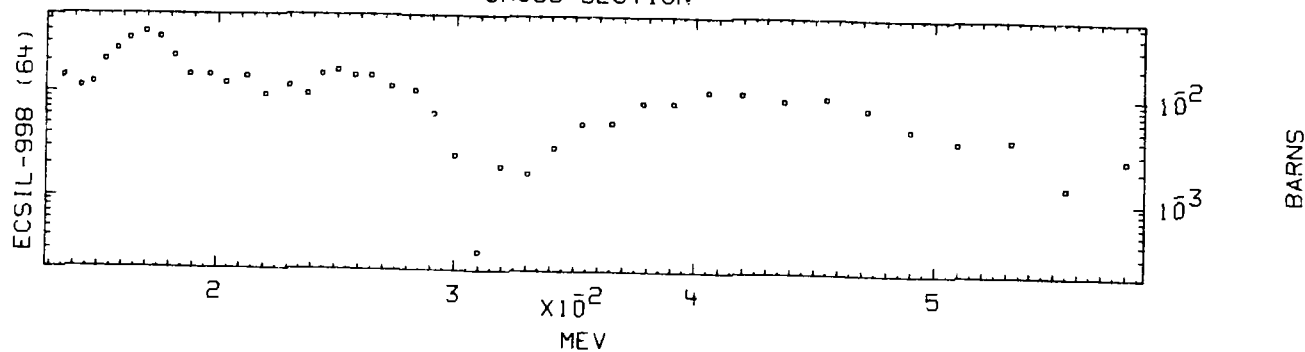
10-38

82-PB-206 -1

03/01/74

N, GAMMA
CROSS SECTION

82-PB-206



03/01/74

TOTAL

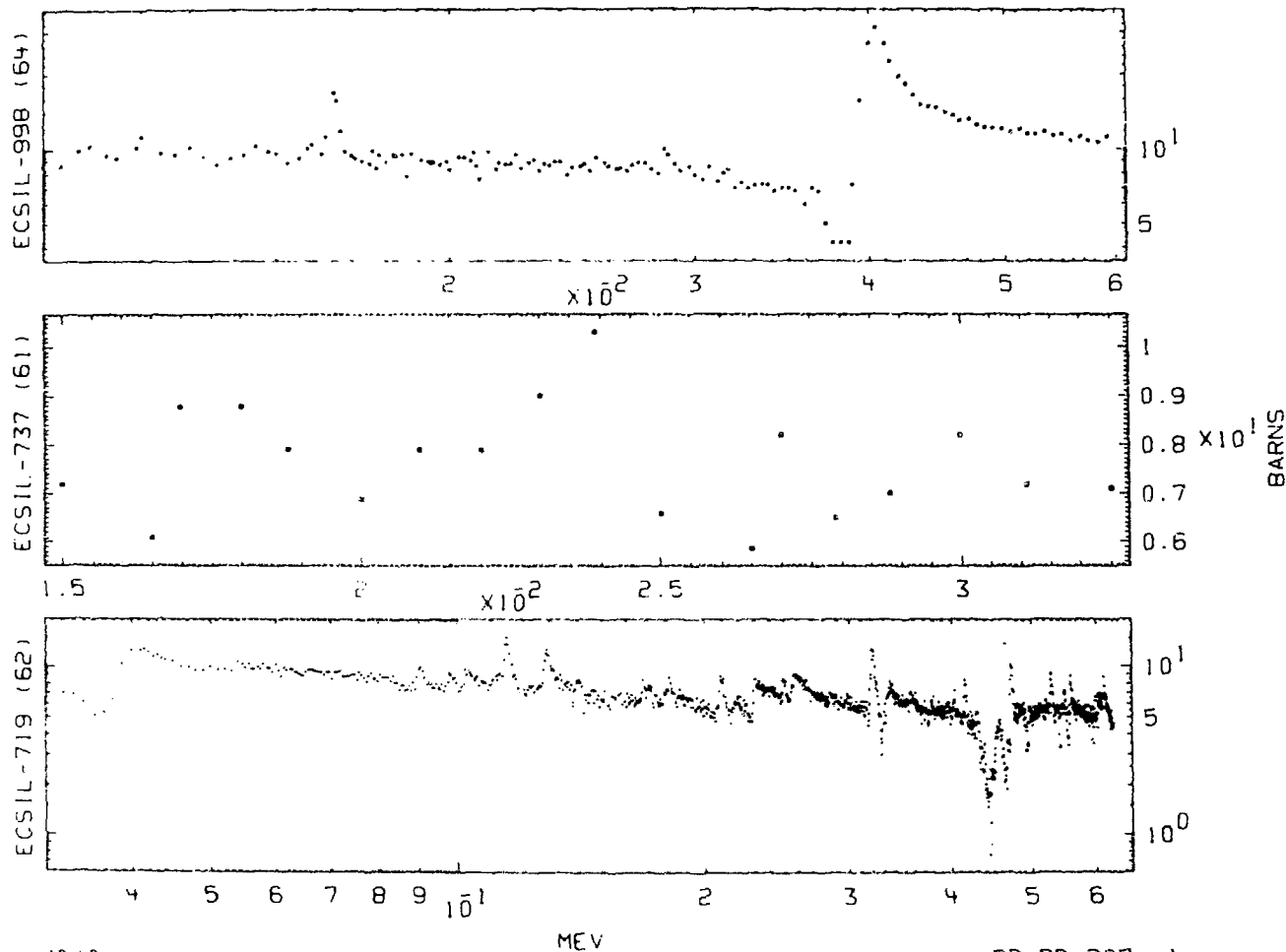
82-PB-206

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
52 81	1.4000+ 1		5.4010+ 0	1.1000- 1
67 1869	1.4200+ 1		5.3700+ 0	4.0000- 2

03/01/74

TOTAL
CROSS SECTION

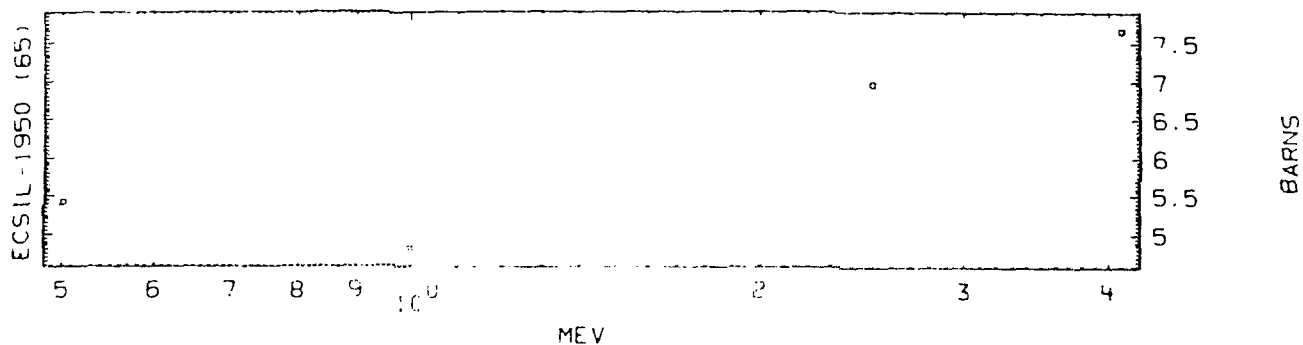
82-PB-207



03/01/74

TOTAL
CROSS SECTION

82-PB-207



03/01/74

TOTAL

82-PB-207

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
67 1869	1.4200 ± 1		5.3000 ± 0	5.0000 ± 2

03/01/74

N, GAMMA

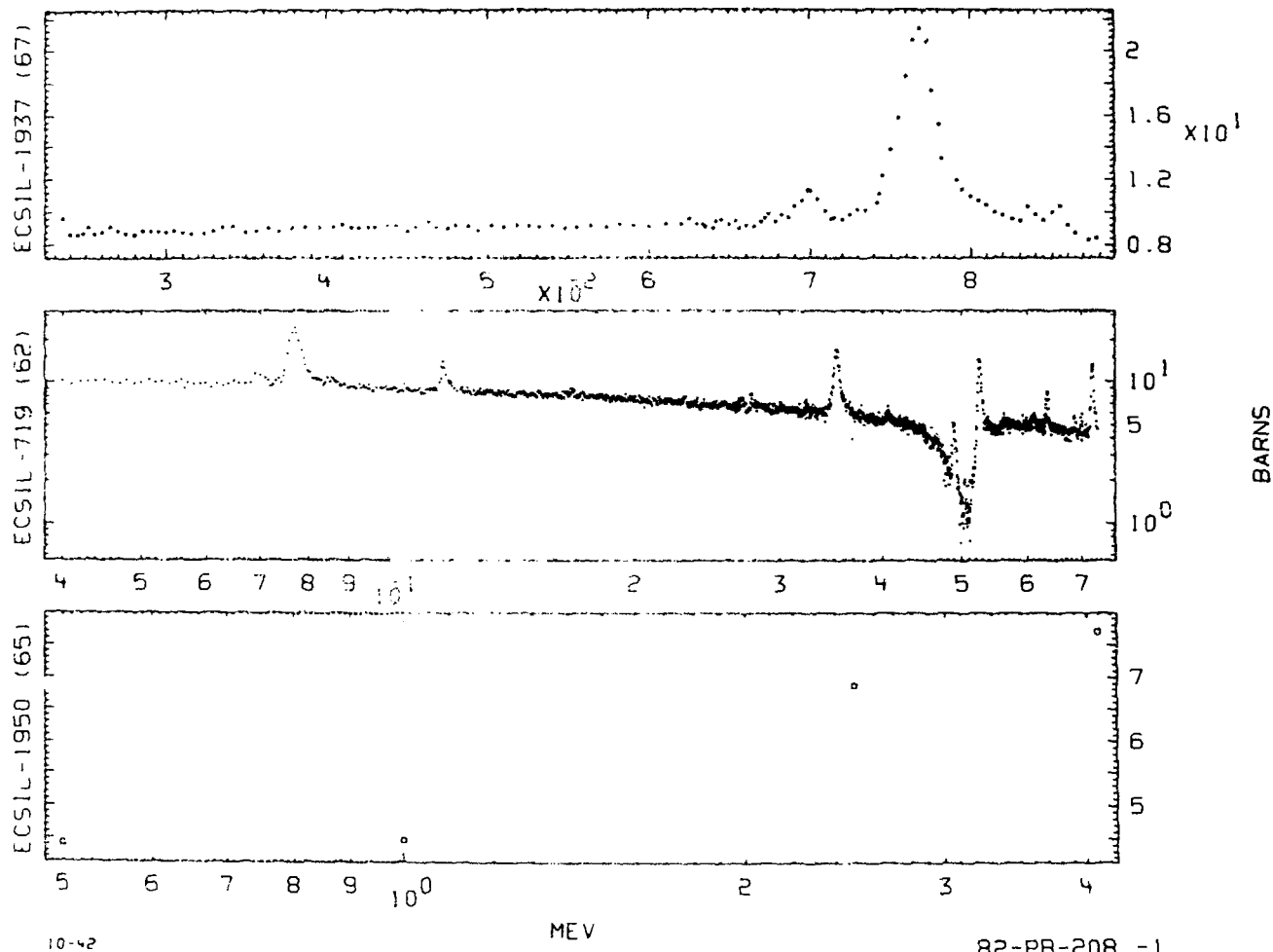
82-PB-207

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	E-PHOTON MEV
71 3220	1.9500 ± 3	7.0000 ± 4	3.2000 ± 3	1.2000 ± 3	7.3690 ± 0

03/01/74

TOTAL
CROSS SECTION

82-PB-208

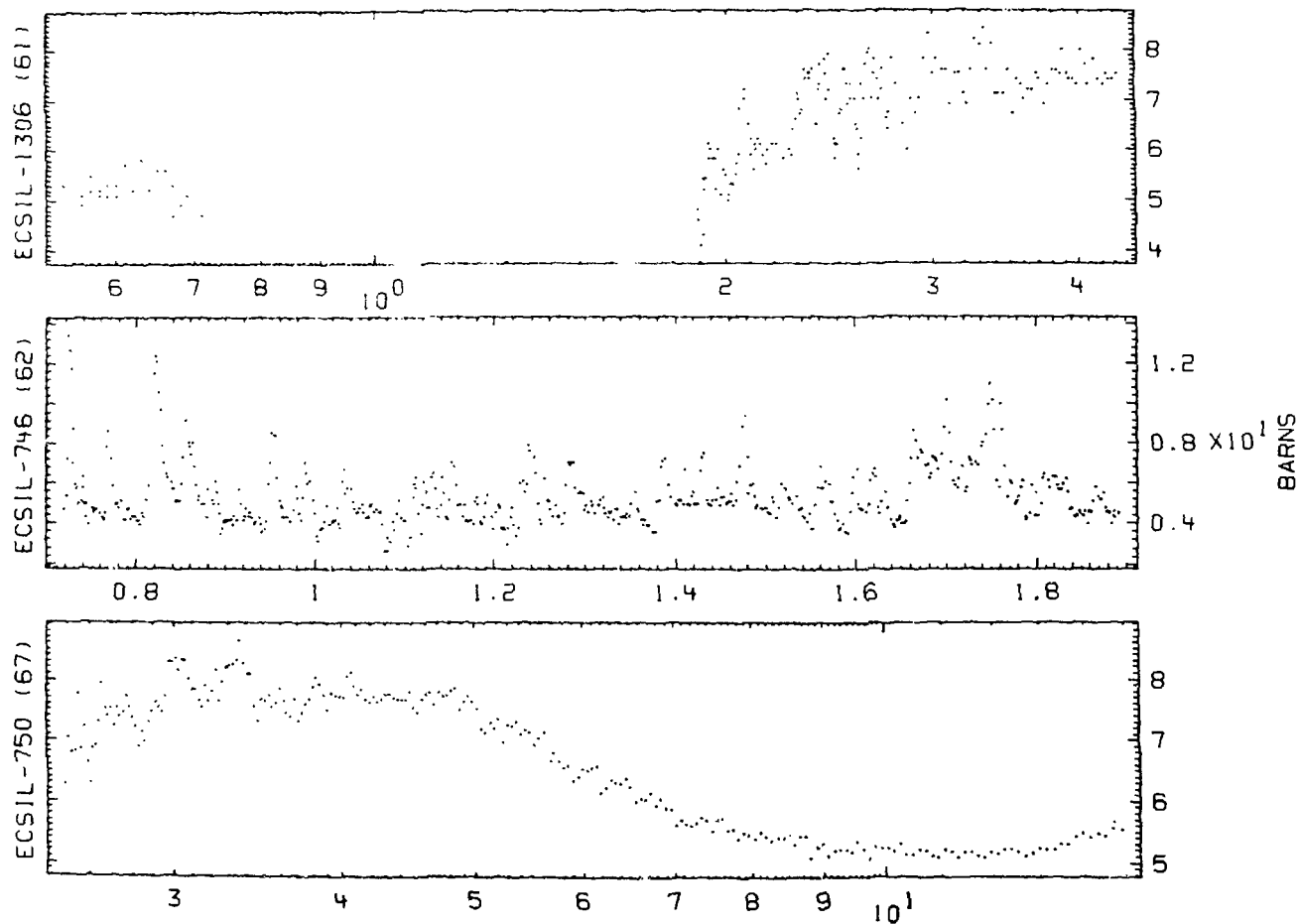


82-PB-208 -1

03/01/74

TOTAL
CROSS SECTION

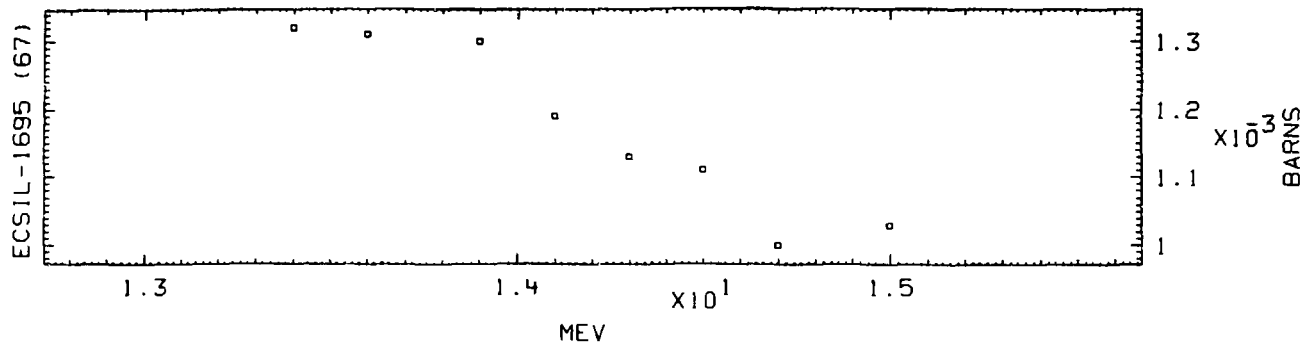
82-PB-208



03/01/74

N,GAMMA
CROSS SECTION

82-PB-208



03/01/74

TOTAL

82-PB-208

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
67 1869	1.4200+ 1		5.2600+ 0	4.0000- 2

03/01/74

N,GAMMA

82-PB-208

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 1788	2.4000- 2		6.5000- 3	1.0000- 3
58 363	2.0000- 1	1.5000- 2	7.5000- 3	3.8000- 3
58 363	2.7000+ 0		1.1000- 3	5.0000- 4
58 363	4.0000+ 0		5.0000- 4	2.5000- 4
71 3194	1.4000+ 1		9.9400- 4	1.9880- 4
57 521	1.4500+ 1		3.0000- 3	4.0000- 4

03/01/74

FISSION
CROSS SECTION

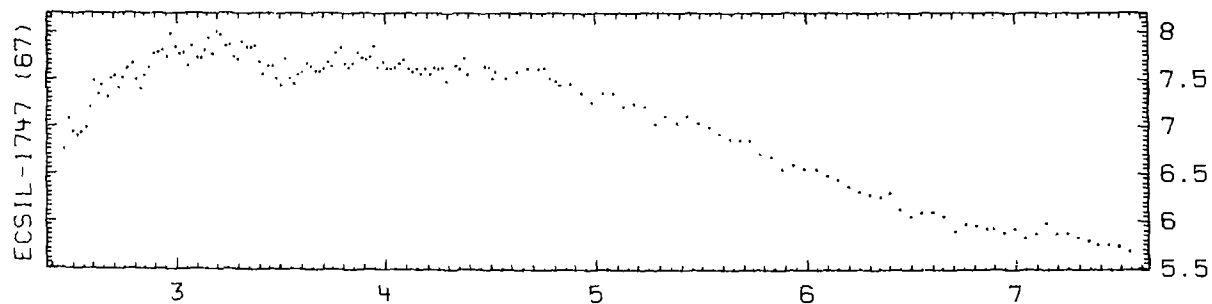
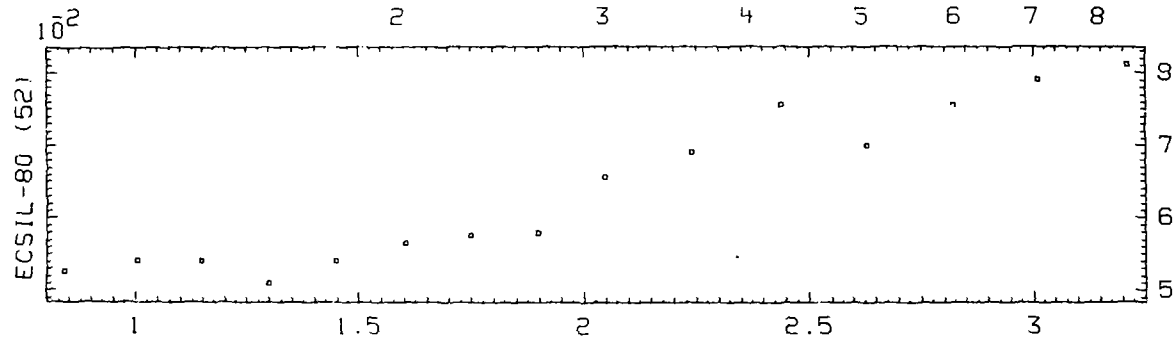
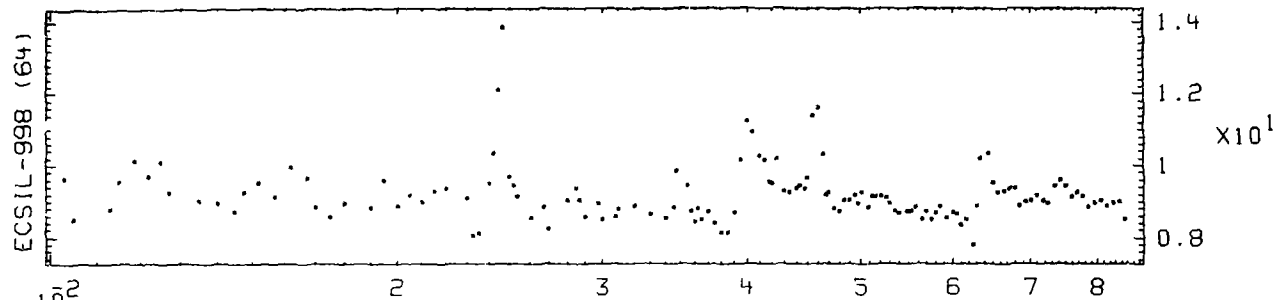
82-PB-209

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
55 461	3.8000 ± 2		$3.3000 - 2$	

03/01/74

TOTAL
CROSS SECTION

RADIO LEAD



10-46

MEV

RADIO LEAD -1

03/01/74

ELASTIC
CROSS SECTION

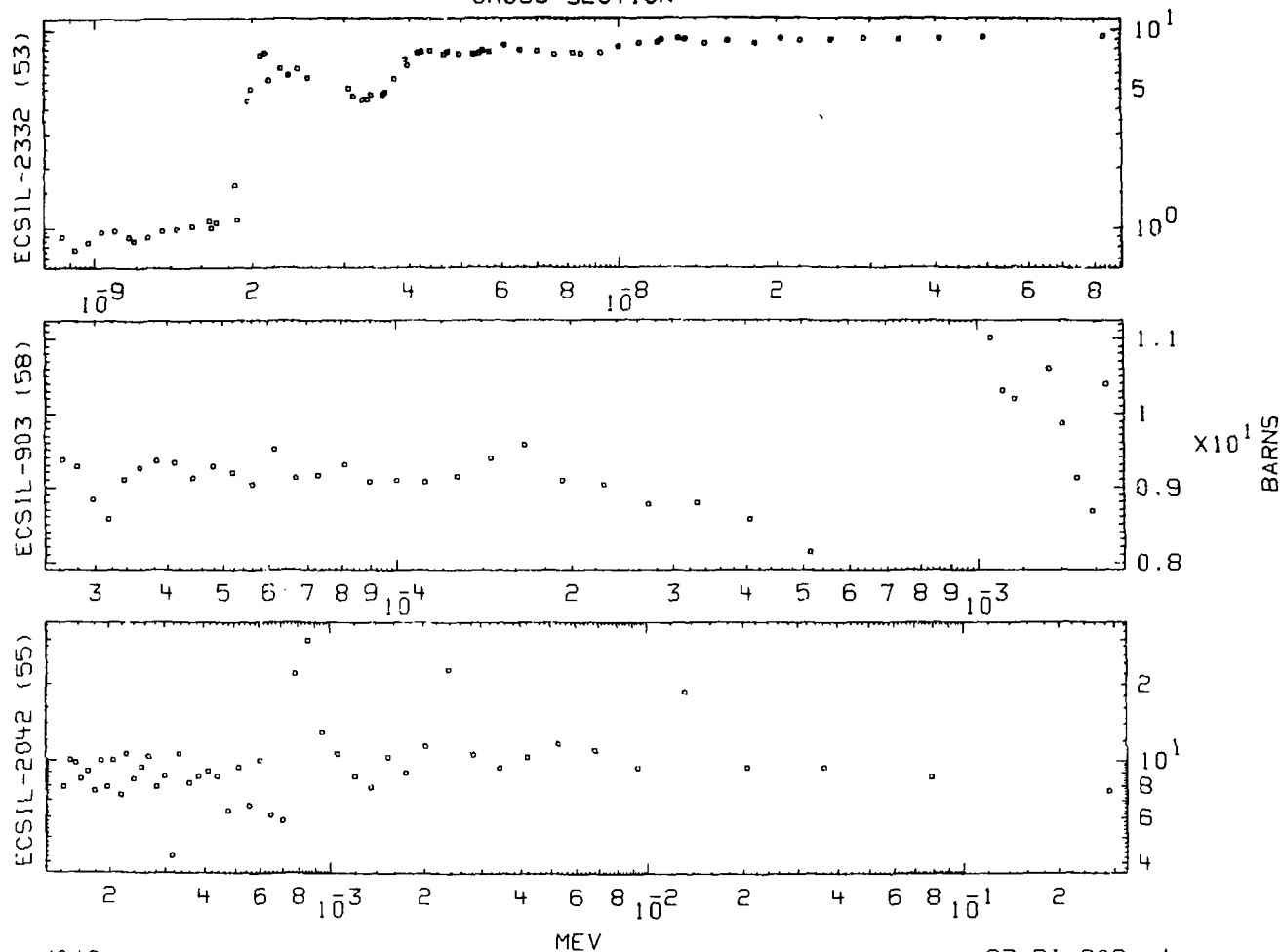
RADIO LEAD

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
59 579	4.2100+ 0	1.0000- 1	4.4000+ 0	7.0000- 1

03/01/74

TOTAL
CROSS SECTION

83-B1-209



10-48

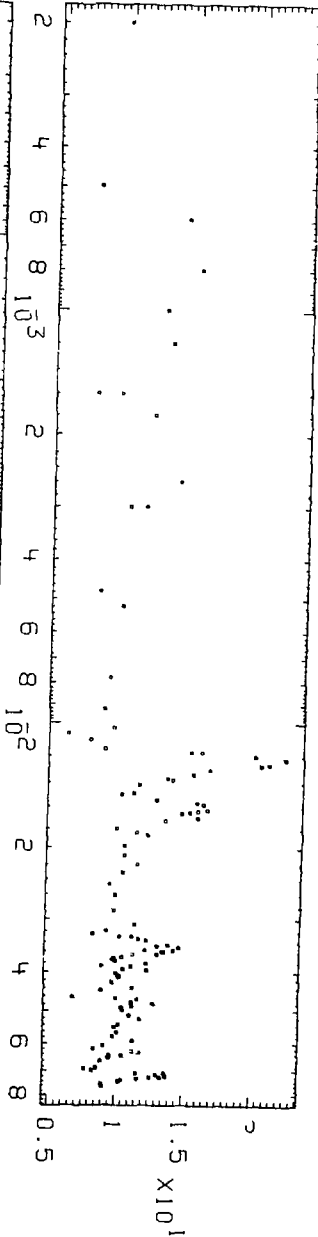
83-B1-209 -1

03/C1/74

TOTAL
CROSS SECTION

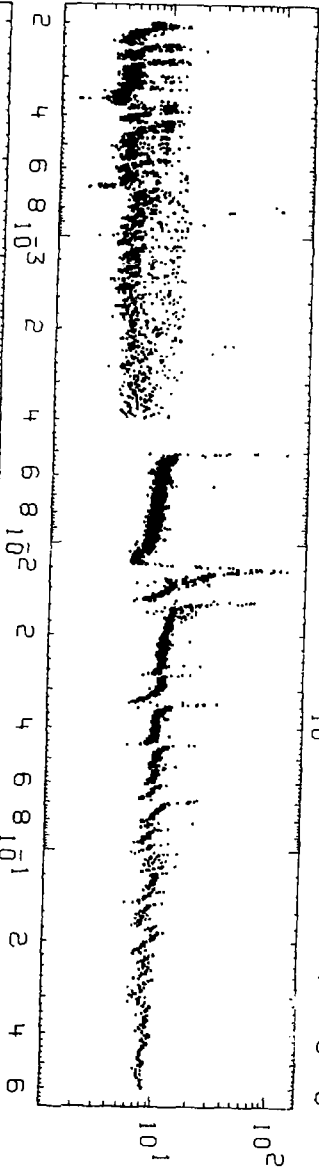
83-B1-209

ECSIL-142 (56)

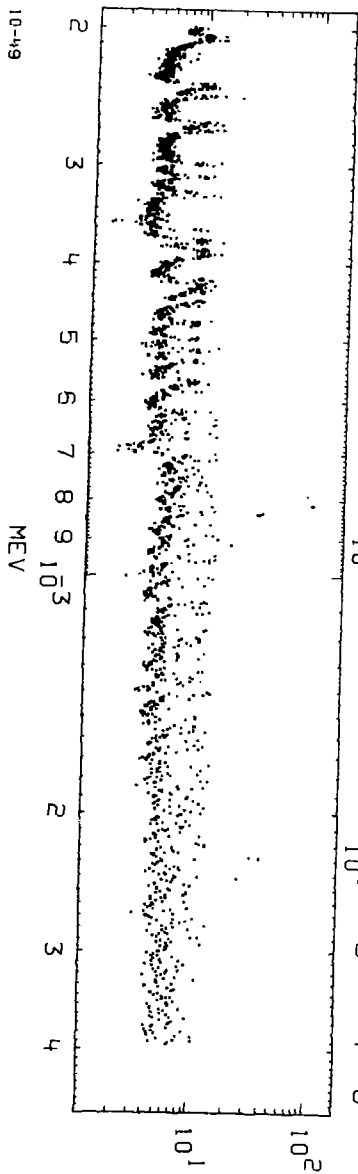


(EXPANDED BELOW)

ECSIL-814 (65)



ECSIL-814 (65)



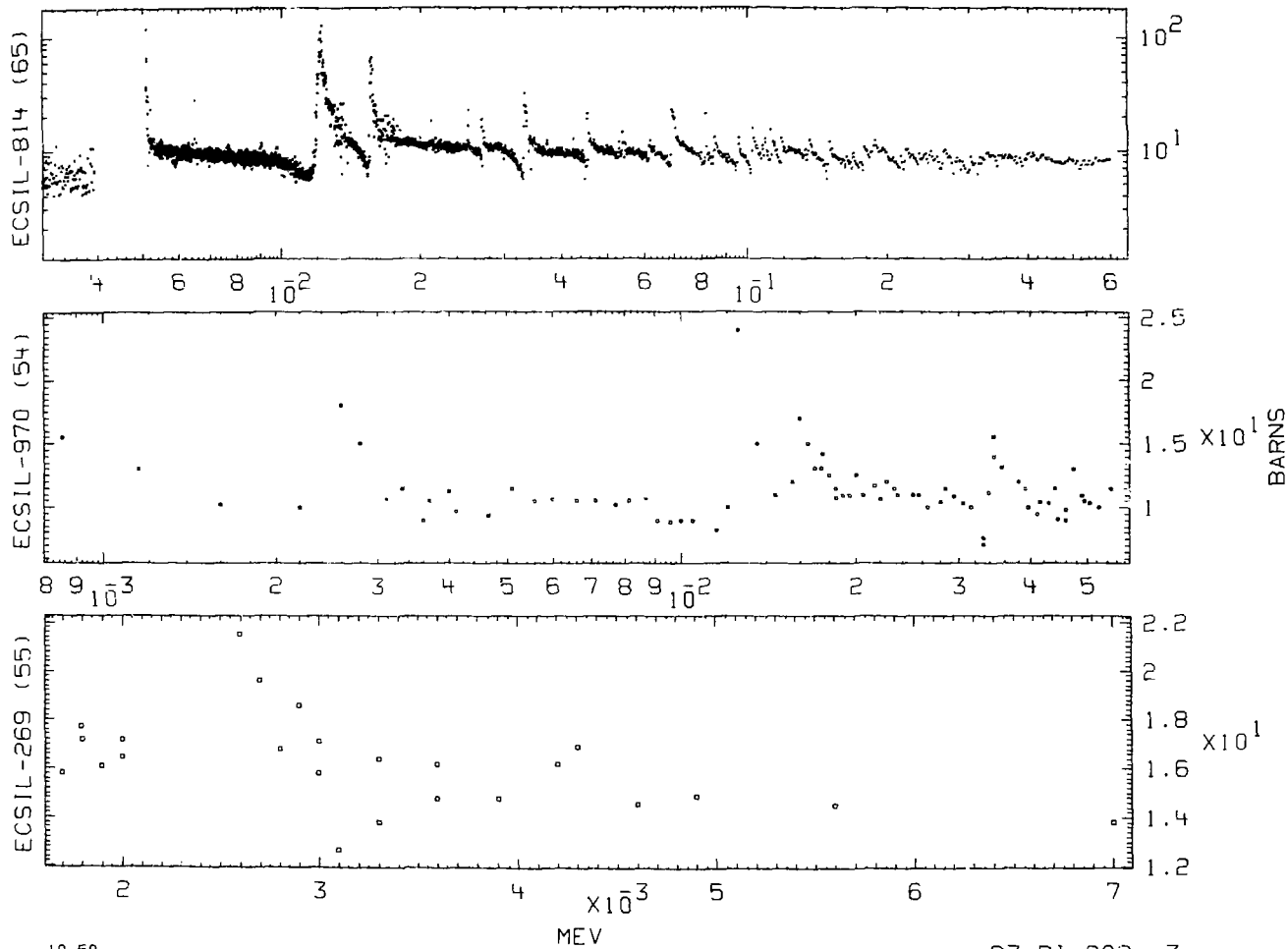
BARNs

83-B1-209 -2

03/01/74

TOTAL
CROSS SECTION

83-B1-209

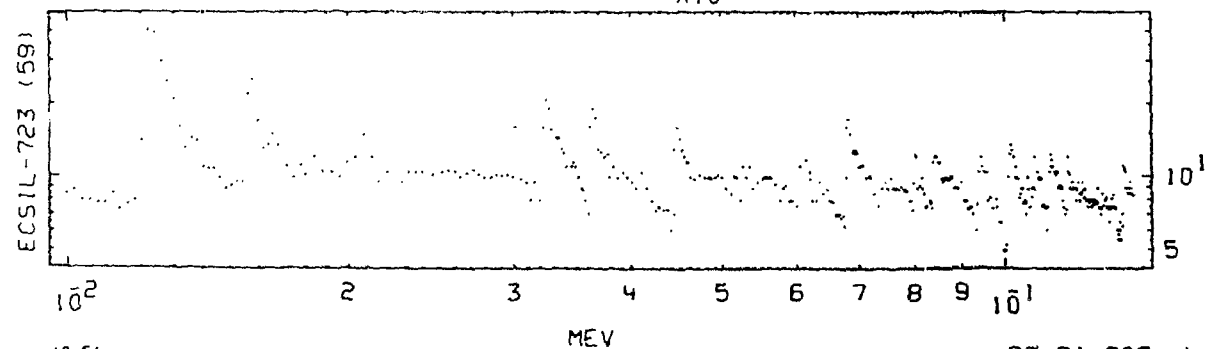
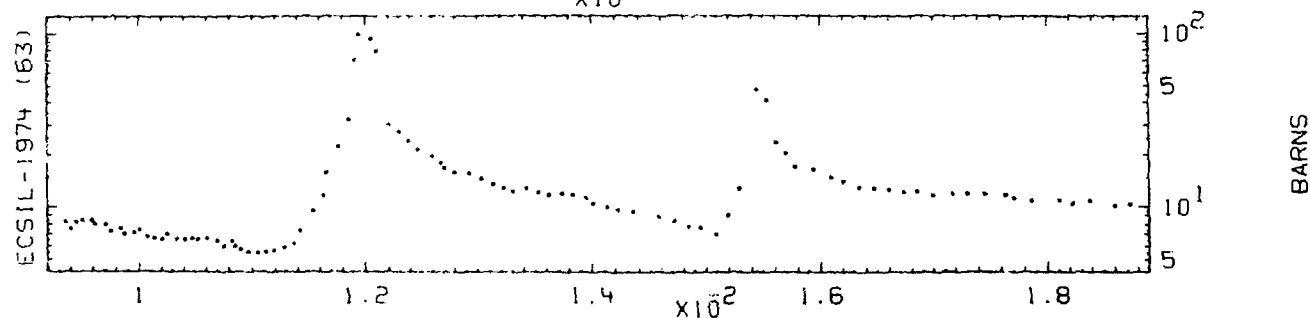
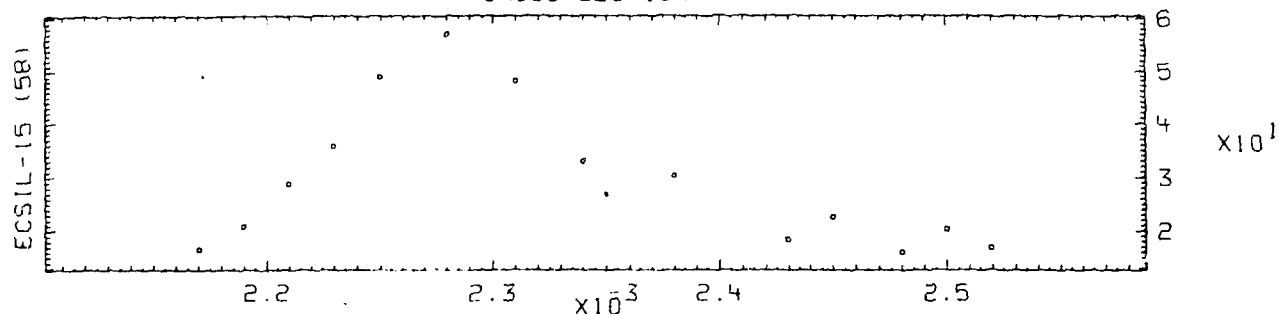


83-B1-209 -3

03/01/74

TOTAL
CROSS SECTION

83-81-209



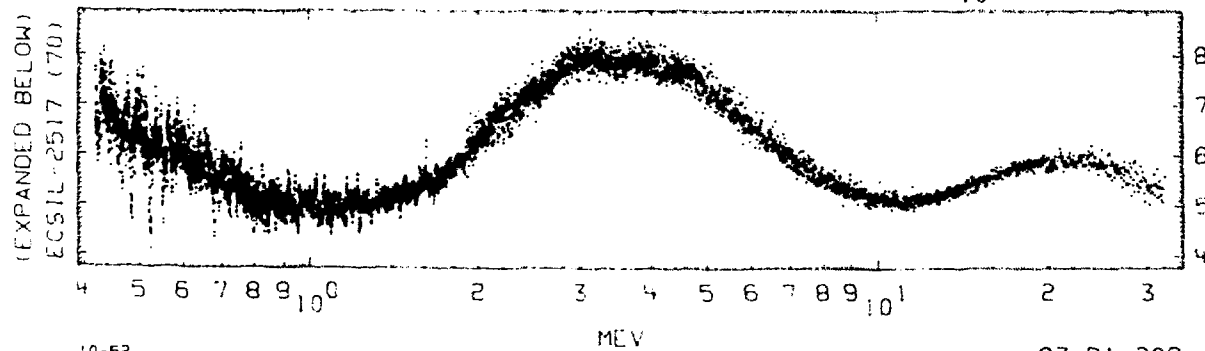
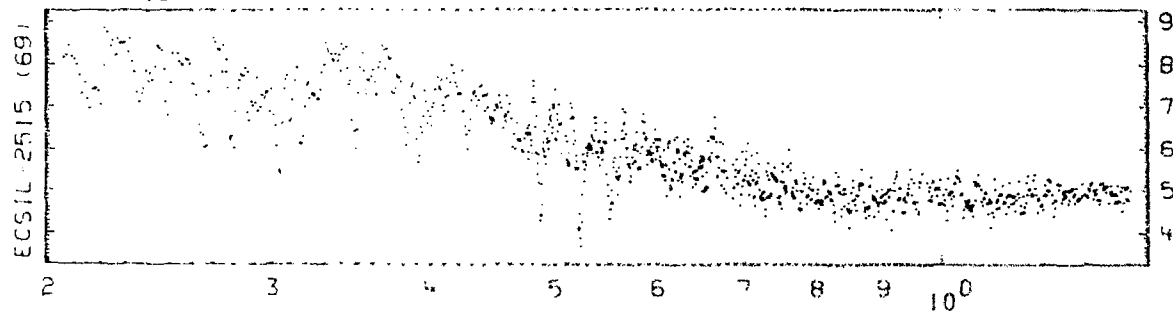
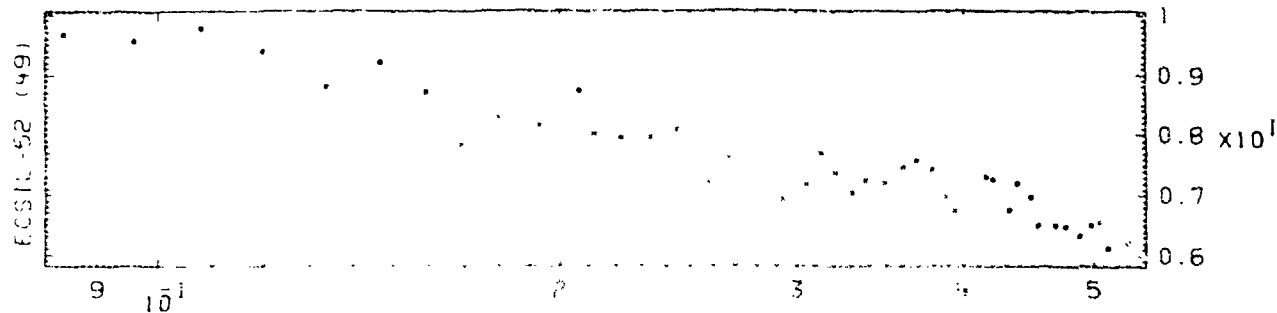
10-51

83-81-209 -4

03/01/74

TOTAL
CROSS SECTION

83-B1-209



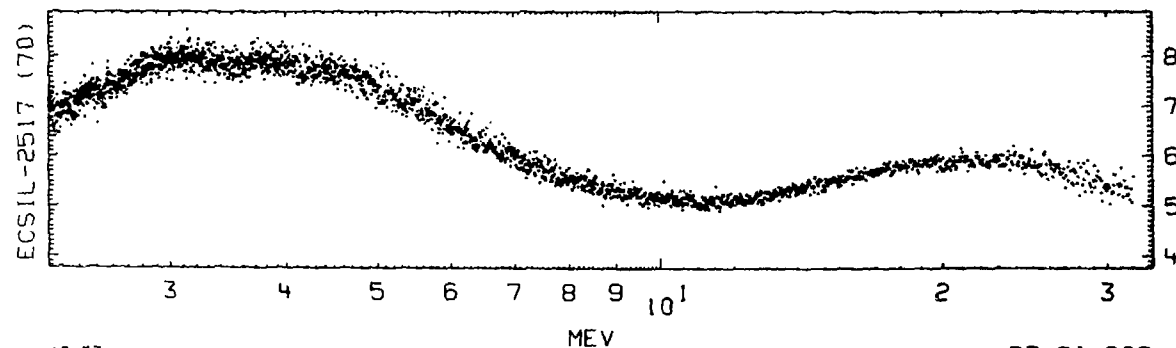
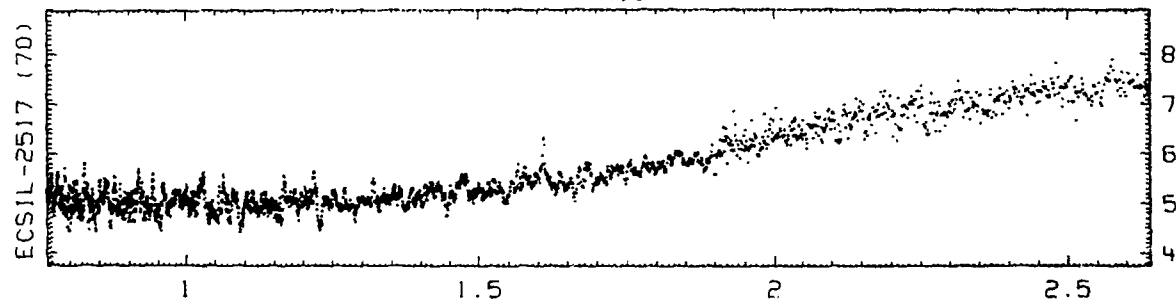
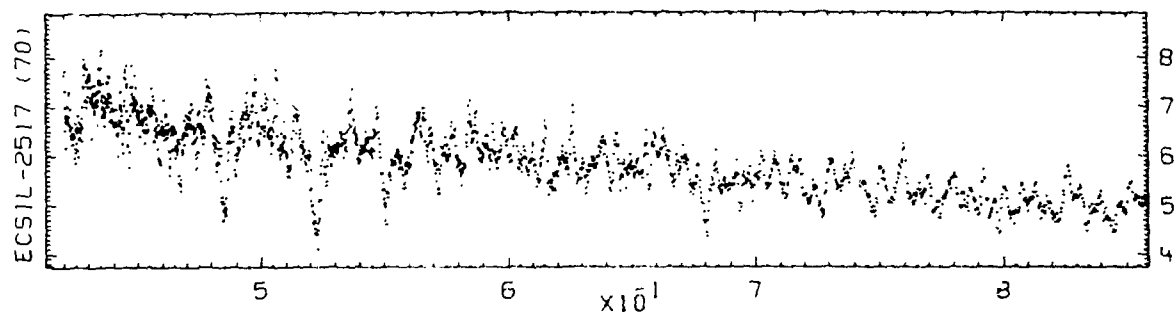
10-52

83-B1-209 -5

03/01/74

TOTAL
CROSS SECTION

83-81-209



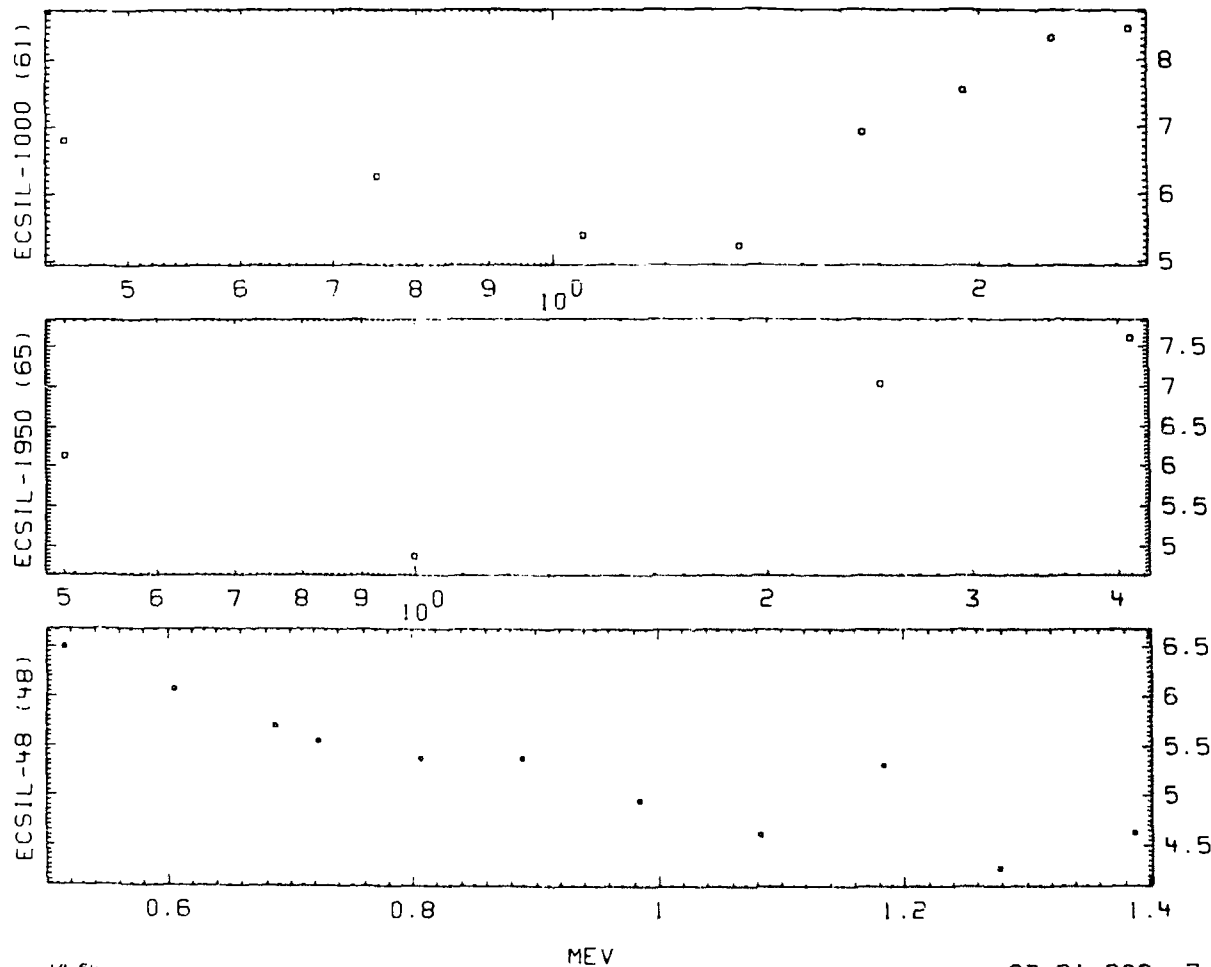
10-53

83-81-209 -6

03/01/74

TOTAL
CROSS SECTION

83-BI-209



10-54

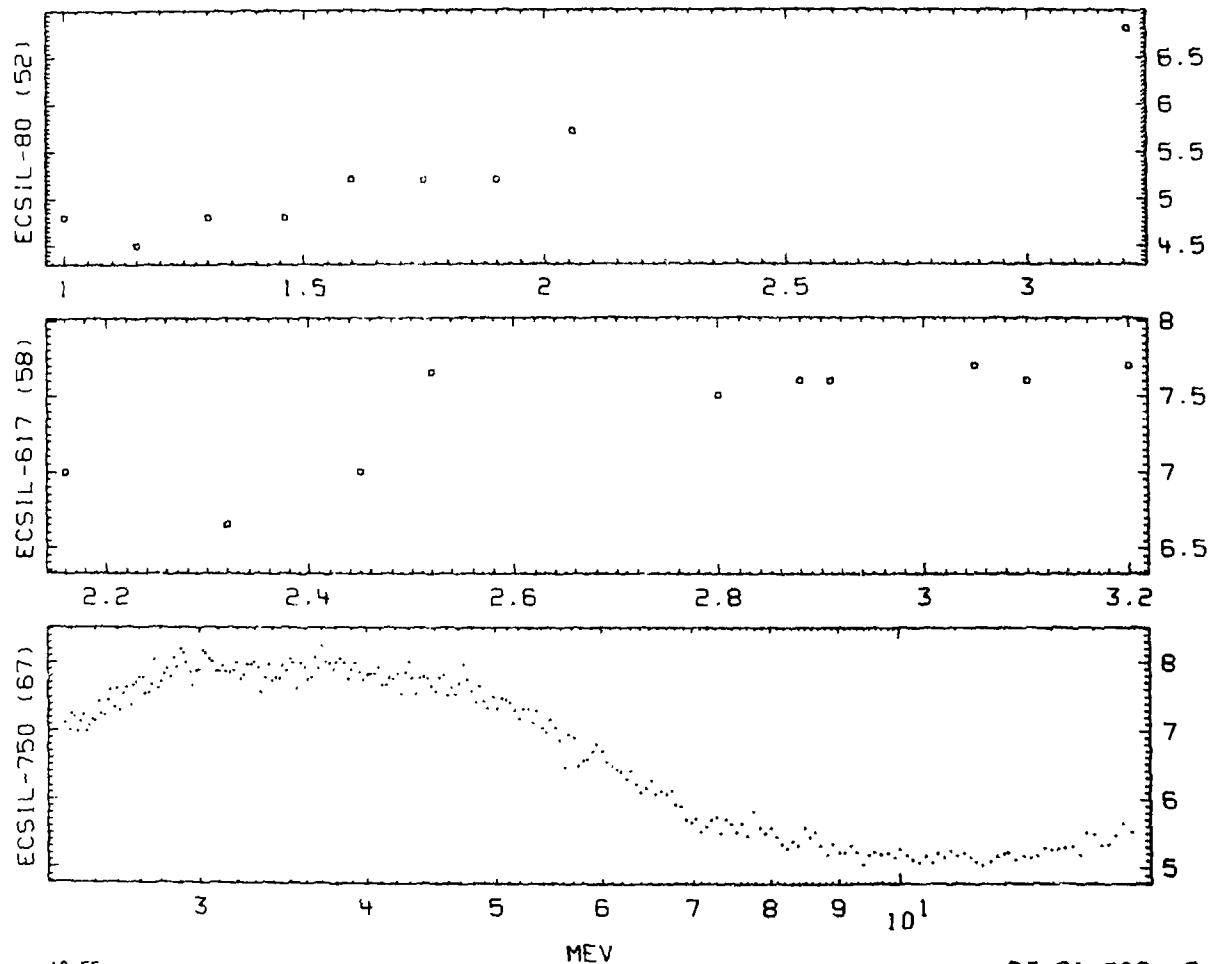
MEV

83-BI-209 -7

03/01/74

TOTAL
CROSS SECTION

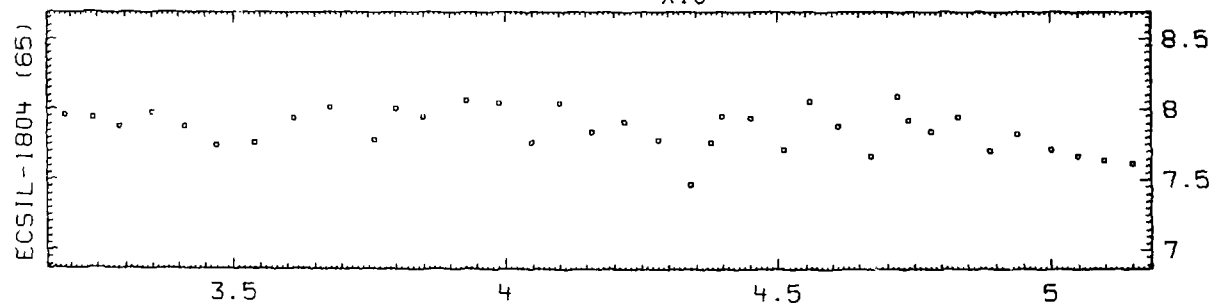
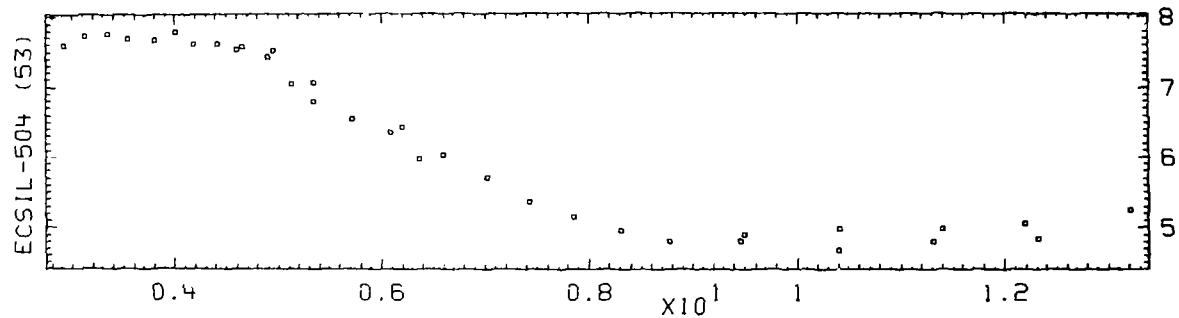
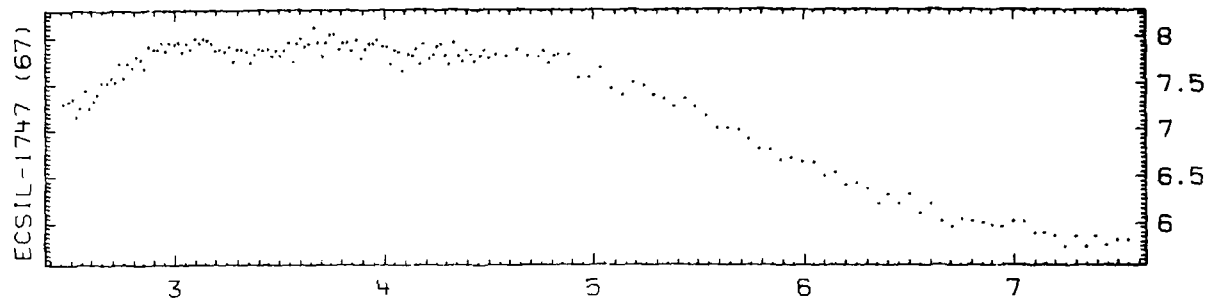
83-B1-209



03/01/74

TOTAL
CROSS SECTION

83-B1-209



10-56

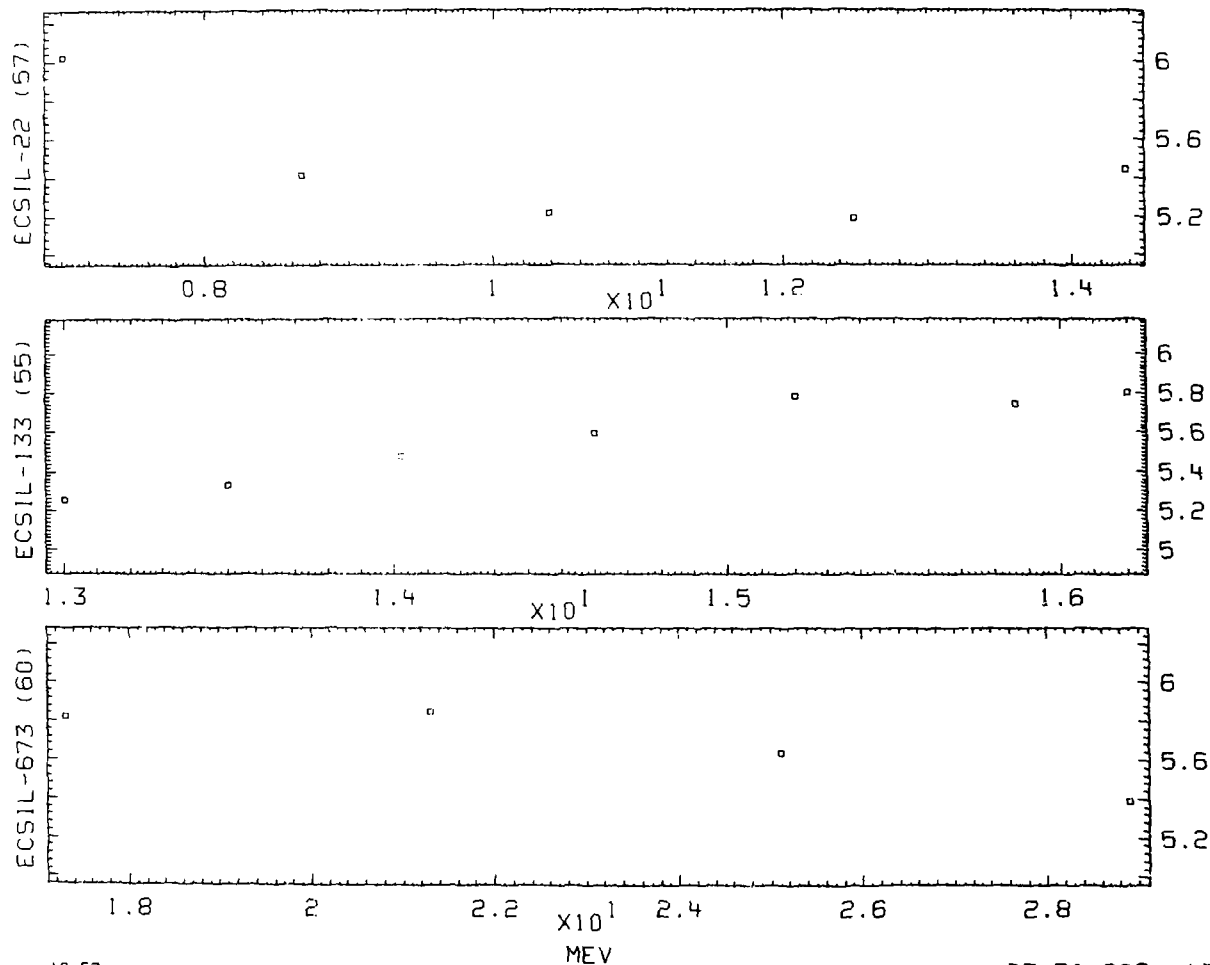
MEV

83-B1-209 -9

03/01/74

TOTAL
CROSS SECTION

83-B1-209



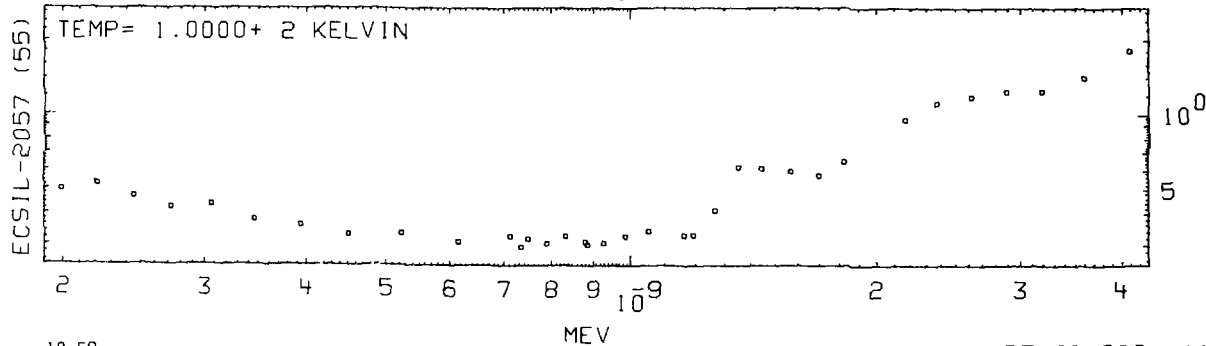
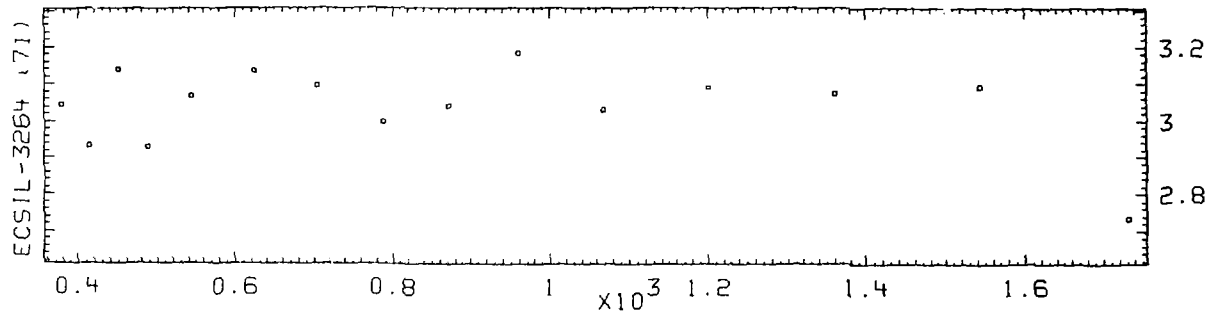
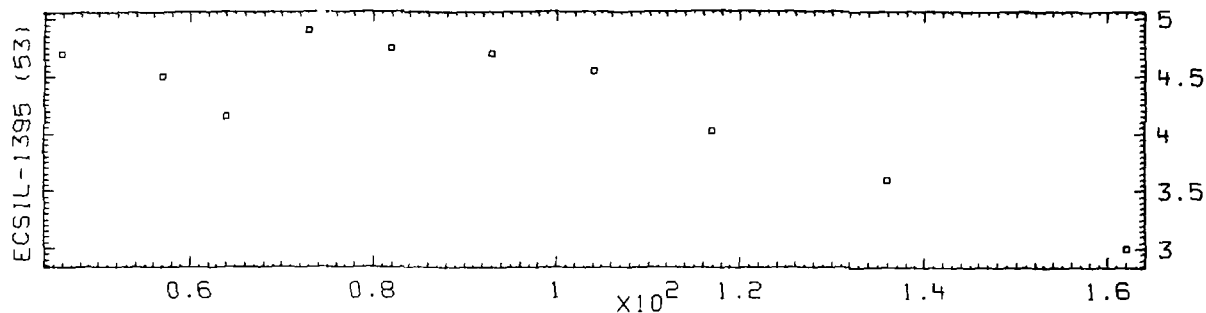
10-57

83-B1-209 -10

03/01/74

TOTAL
CROSS SECTION

83-B1-209



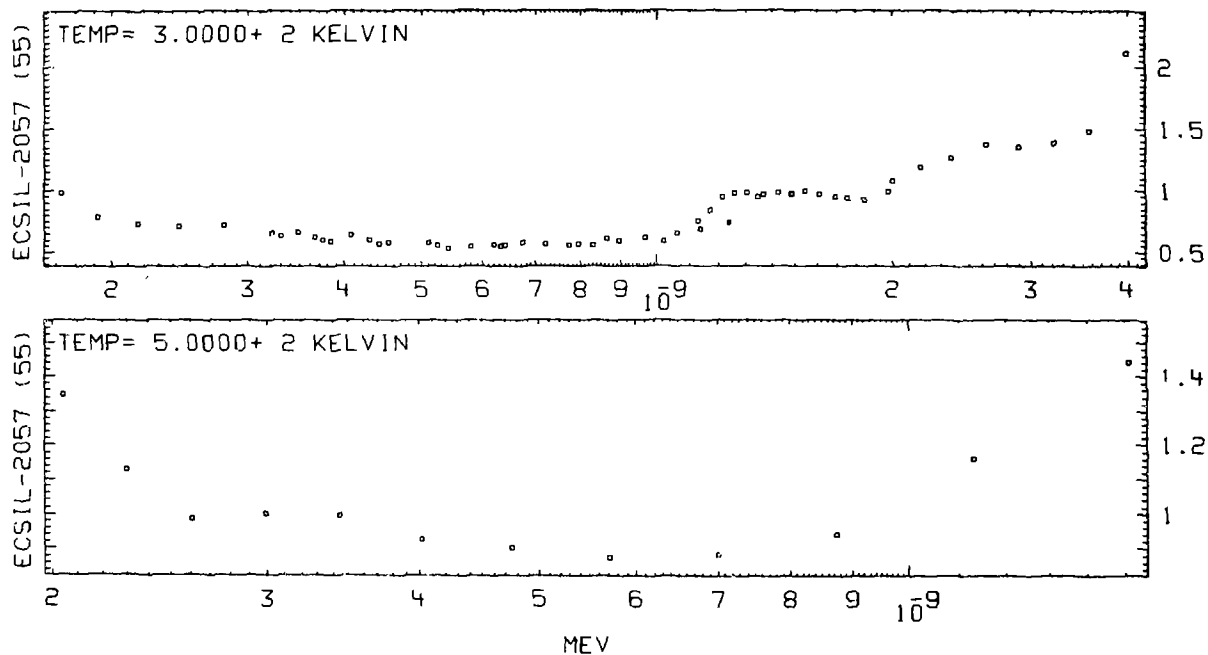
10-58

83-B1-209 -11

03/01/74

TOTAL CROSS SECTION

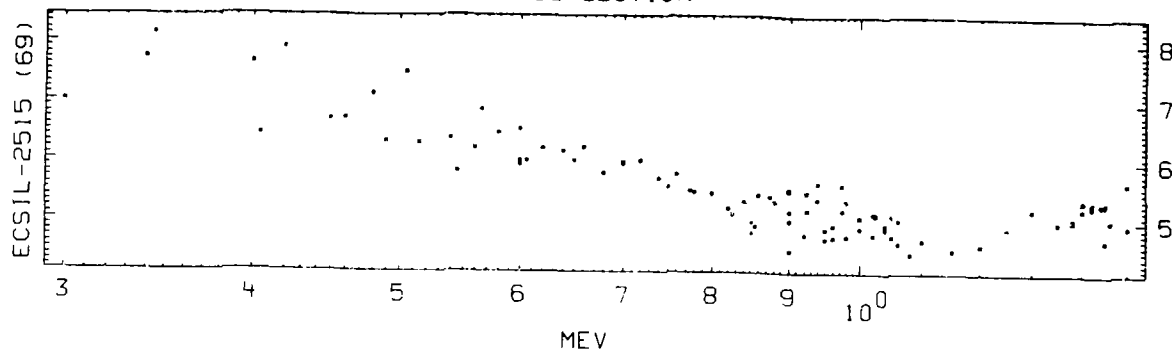
83-B1-209



03/01/74

ELASTIC
CROSS SECTION

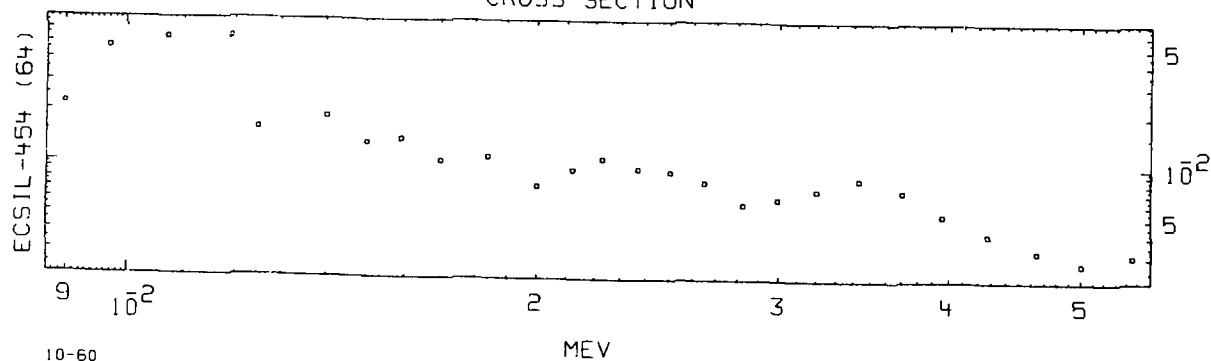
83-B1-209



03/01/74

N. GAMMA
CROSS SECTION

83-B1-209



10-60

83-B1-209 -13

03/01/74

TOTAL
CROSS SECTION

83-B1-209

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65	949 1.4400- 6		9.1000+ 0	5.0000- 2	52	207 1.4000+ 1		5.2010+ 0	5.0000- 1
55	1471 4.8970- 6		9.3300+ 0	4.2000- 2	55	262 1.4000+ 1		5.3310+ 0	8.0010- 2
49	844 1.1500- 4	1.1500- 5	9.2810+ 0		52	81 1.4000+ 1		5.4610+ 0	1.1000- 1
49	844 3.0000- 4	3.0000- 5	1.0600+ 1		67	1869 1.4200+ 1		5.3300+ 0	4.0000- 2
57	2330 2.2000- 1		7.9200+ 0	5.0000- 2	57	368 1.4800+ 1		5.3310+ 0	8.0010- 2
54	303 3.7000+ 0	1.0000- 1	8.3010+ 0	1.2000+ 0	53	274 1.9000+ 1	3.3000- 1	5.6910+ 0	1.7000- 1
67	1643 4.0000+ 0	5.0000- 2	7.5200+ 0	2.3000- 1	50	281 4.2000+ 1	1.0000+ 0	4.5800+ 0	6.0010- 2
55	296 4.1000+ 0	4.0000- 2	7.9010+ 0	2.0000- 1	55	2056 1.4000+ 3	2.0000+ 2	3.2800+ 0	9.8400- 2

03/01/74

ELASTIC

83-B1-209

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
60	596 2.2000- 1		8.2310+ 0		59	579 4.2100+ 0	1.0000- 1	4.7000+ 0	8.0010- 1
64	2338 3.0000- 1	2.5000- 2	7.1100+ 0	4.6000- 1	65	889 6.0400+ 0	2.3000- 1	3.4000+ 0	5.0000- 1
64	670 5.0000- 1	5.0000- 2	6.4000+ 0	2.2000- 1	69	2890 6.0900+ 0		3.2200+ 0	1.6000- 1
64	870 8.0000- 1	5.0000- 2	5.3000+ 0	1.6000- 1	69	2890 7.0500+ 0		2.9900+ 0	1.5000- 1
54	103 1.0000+ 0	8.0000- 2	4.8000+ 0	7.2000- 1	69	2890 8.0500+ 0		2.7000+ 0	1.4000- 1
65	1509 2.0000+ 0	5.0000- 2	6.3000+ 0		56	21 1.0000+ 1		2.2300+ 0	
64	1643 4.0000+ 0	5.0000- 2	5.7000+ 0	4.0000- 1	60	631 1.4600+ 1	1.0000- 1	2.7100+ 0	2.4000- 1

03/01/74

FISSION

83-B1-209

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65	1976 1.4800+ 1	2.0000- 1	3.5000- 8	1.0000- 8	55	461 3.5000+ 2		7.4000- 2	
55	461 1.2000+ 2		3.6000- 2						

03/01/74

N, GAMMA

83-B1-209

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
63	1 3.0000- 2	8.0010- 3	1.0000- 3	5.0000- 3	63	1 6.5000- 2	2.1000- 2	4.0000- 3	4.0000- 3

03/01/74

N, GAMMA
CROSS SECTION

83-B1-209

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BAR	DELTA BARN	HALF-LIFE DAYS
47 888	2.5300- 8		1.5000- 2	3.0000- 3	5.0000+ 0
57 23	2.1000- 2	4.0000- 3	1.8000- 3	7.0010- 4	5.0000+ 0
61 677	3.0000- 2	7.0010- 3	1.0000- 3	4.0000- 3	5.0000+ 0
61 677	6.5000- 2	2.0000- 2	4.0000- 3	3.0000- 3	5.0000+ 0
60 674	4.0000- 1	9.0010- 2	2.0000- 3	3.0000- 3	5.0000+ 0
57 521	1.4500+ 1		1.5000- 3	2.0000- 4	5.0000+ 0
67 1695	1.4700+ 1		1.2000- 3	2.0000- 4	5.0100+ 0

03/01/74

NEUTRONS/NONELASTIC EVENT

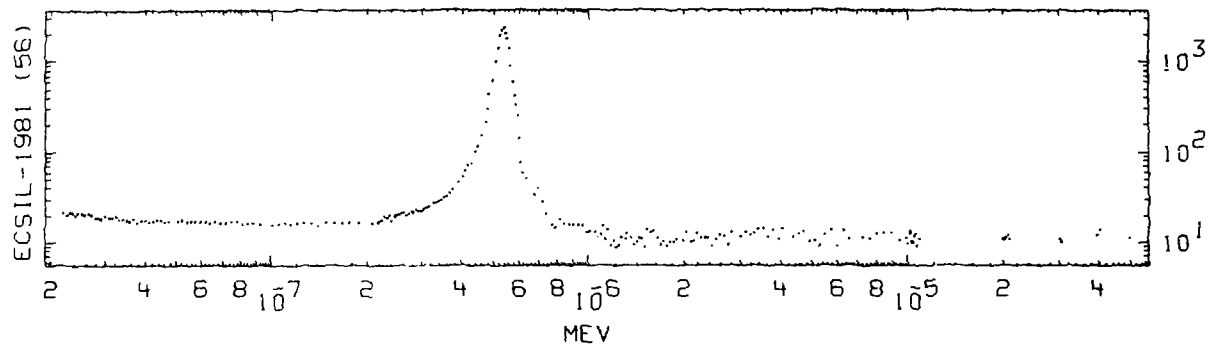
83-B1-209

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
58 877	1.4000+ 1		1.8800+ 0	2.0000- 1

03/01/74

TOTAL
CROSS SECTION

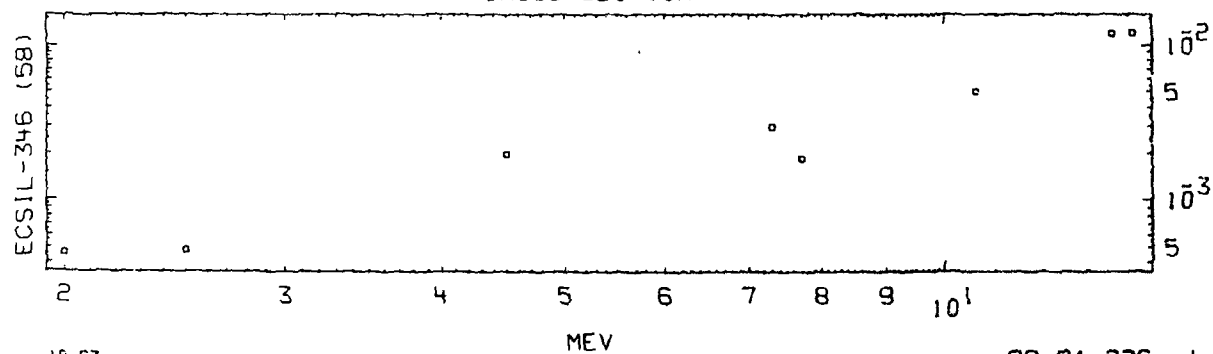
88-RA-226



03/01/74

FISSION
CROSS SECTION

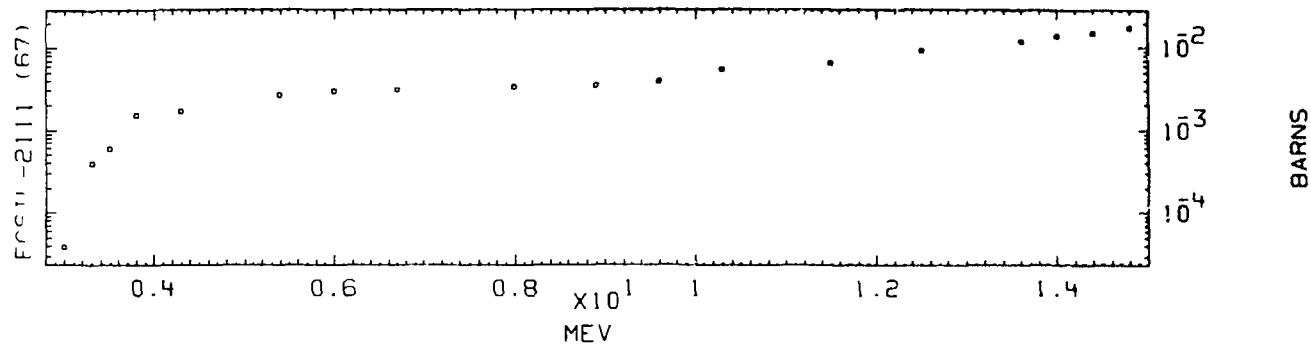
88-RA-226



03/01/74

FISSION
CROSS SECTION

88-RA-226



03/01/74

N, GAMMA

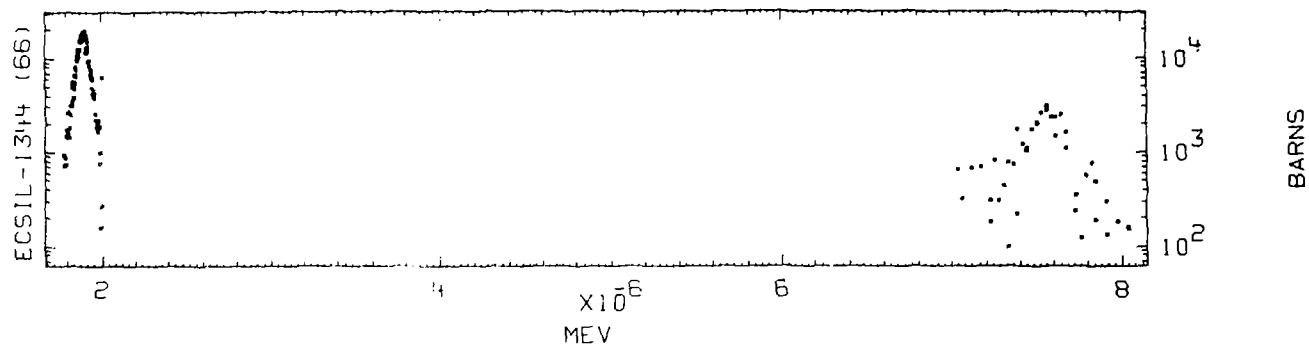
88-RA-226

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
52-2046	2.5300- 8		2.3000+ 1	2.0000+ 0

03/01/74

TOTAL
CROSS SECTION

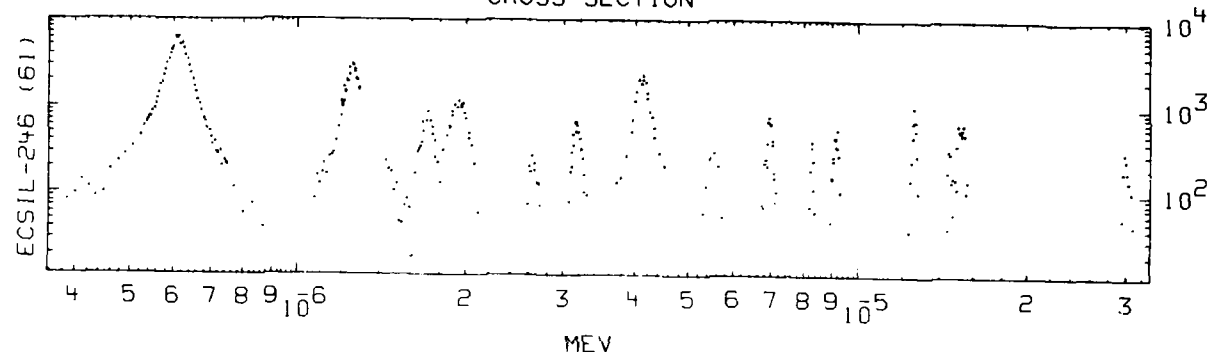
90-TH-228



03/01/74

TOTAL
CROSS SECTION

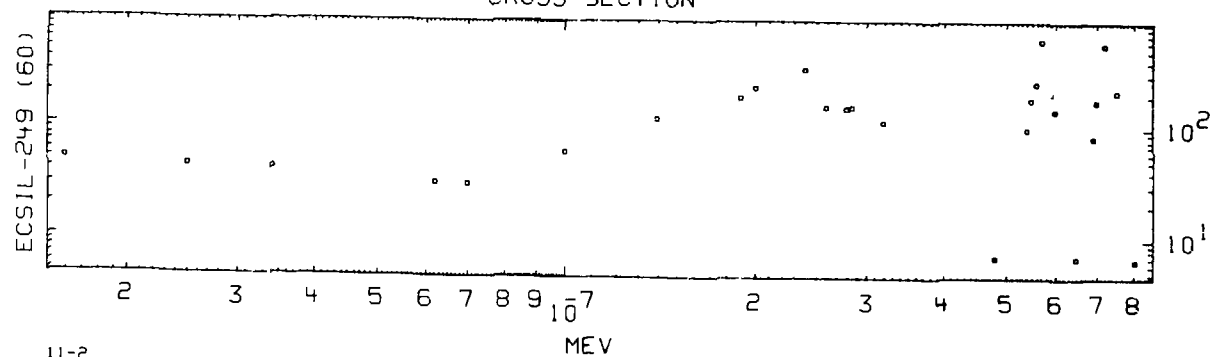
90-TH-229



03/01/74

FISSION
CROSS SECTION

90-TH-229



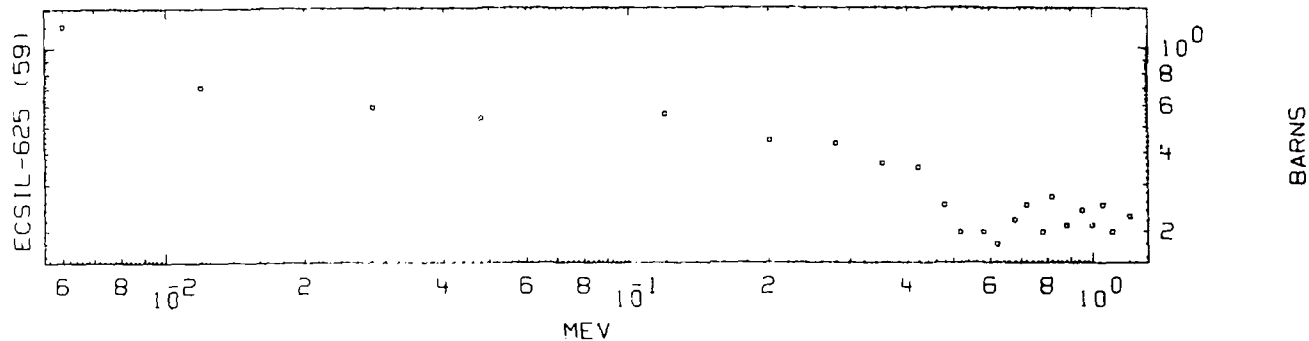
11-2

90-TH-229 -1

03/01/74

FISSION
CROSS SECTION

90-TH-229



03/01/74

PROMPT NEUTRONS/FISSION

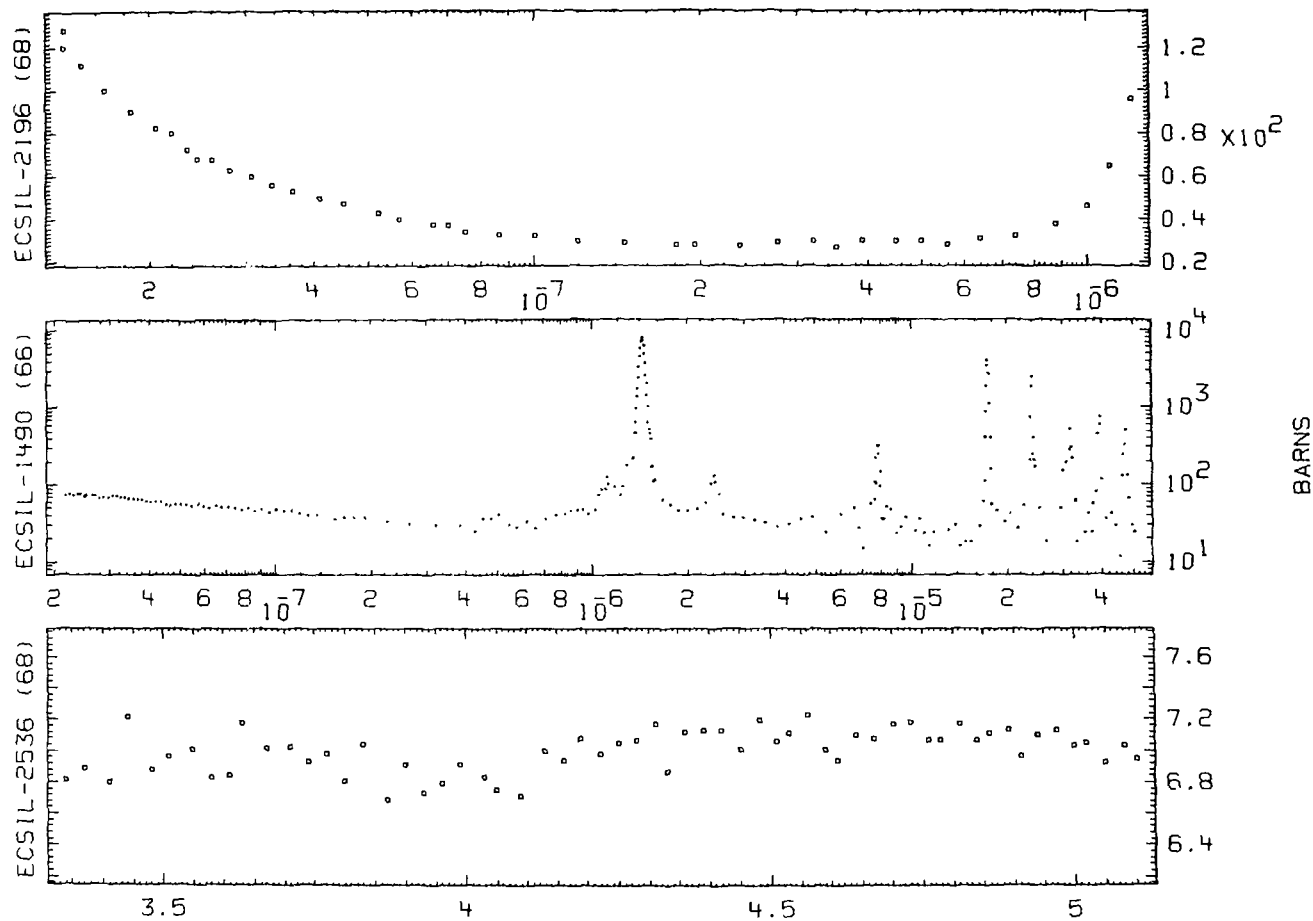
90-TH-229

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
61 1088	2.5300- 8		2.3200+ 0	6.0000- 2
58 1156	2.5300- 8		2.1300+ 0	3.0000- 2

03/01/74

TOTAL
CROSS SECTION

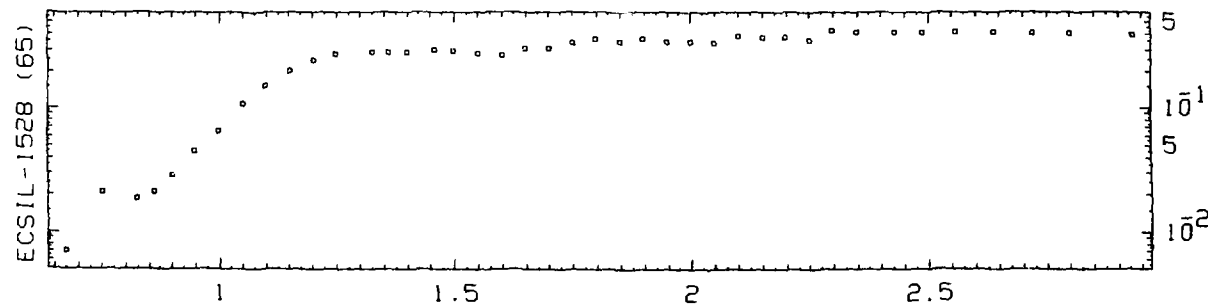
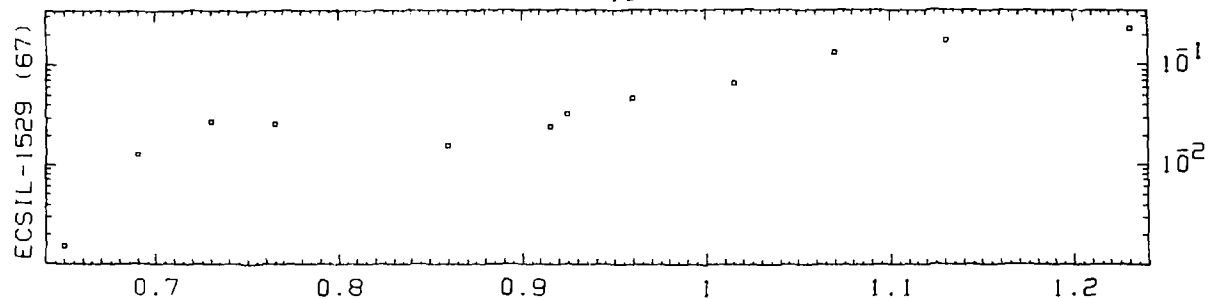
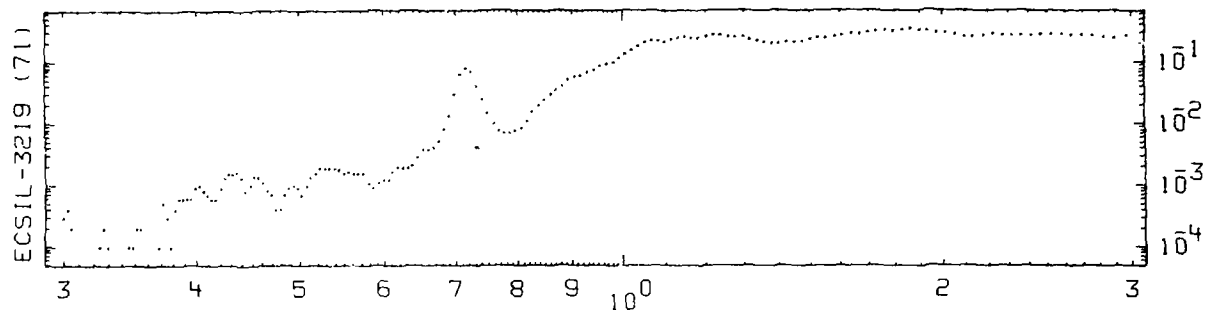
90-TH-230



J3/01/74

FISSION
CROSS SECTION

90-TH-230



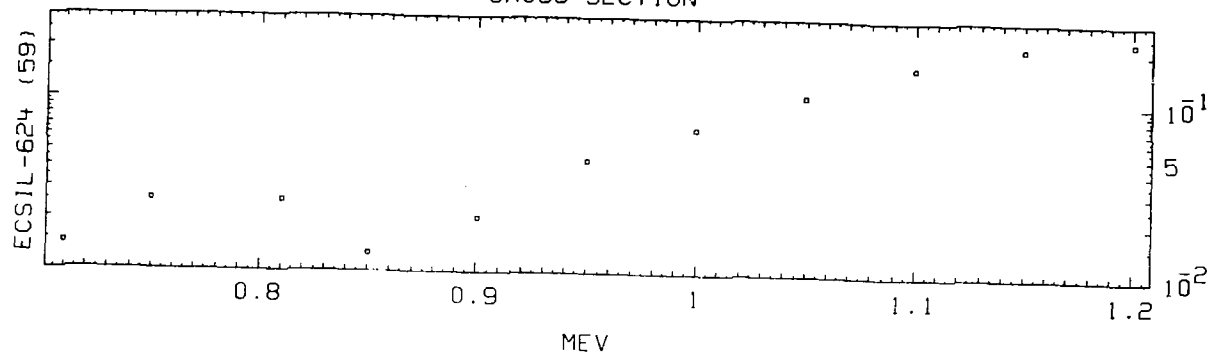
BARNs

MEV

03/01/74

FISSION
CROSS SECTION

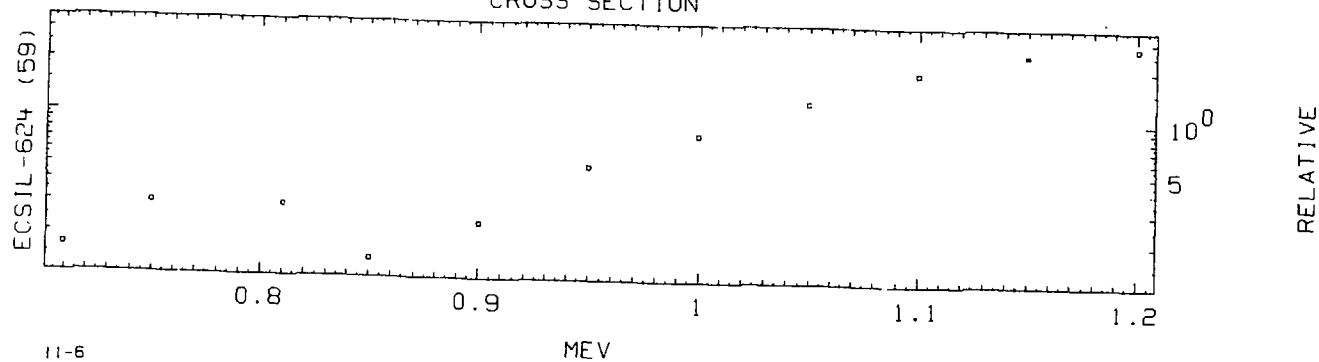
90-TH-230



03/01/74

FISSION
CROSS SECTION

90-TH-230



11-6

90-TH-230 -3

03/01/74

TOTAL
CROSS SECTION

90-TH-230

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
69 2362	2.5000- 8		7.1800+ 1	2.0000+ 0

03/01/74

ELASTIC

90-TH-230

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
69 2362	2.5000- 8		1.5000+ 1	2.0000+ 0

03/01/74

FISSION

90-TH-230

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
60 635	2.5000+ 0		4.1000- 1	8.0010- 2
60 635	1.4600+ 1		7.2010- 1	1.5000- 1

03/01/74

N, GAMMA

90-TH-230

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
69 2362	2.5000- 8		5.6800+ 1	3.0000+ 0
58 423	2.5300- 8		2.2700+ 1	6.0000- 1
52 1201	2.5300- 8		6.1000+ 1	

03/01/74

FISSION
CROSS SECTION

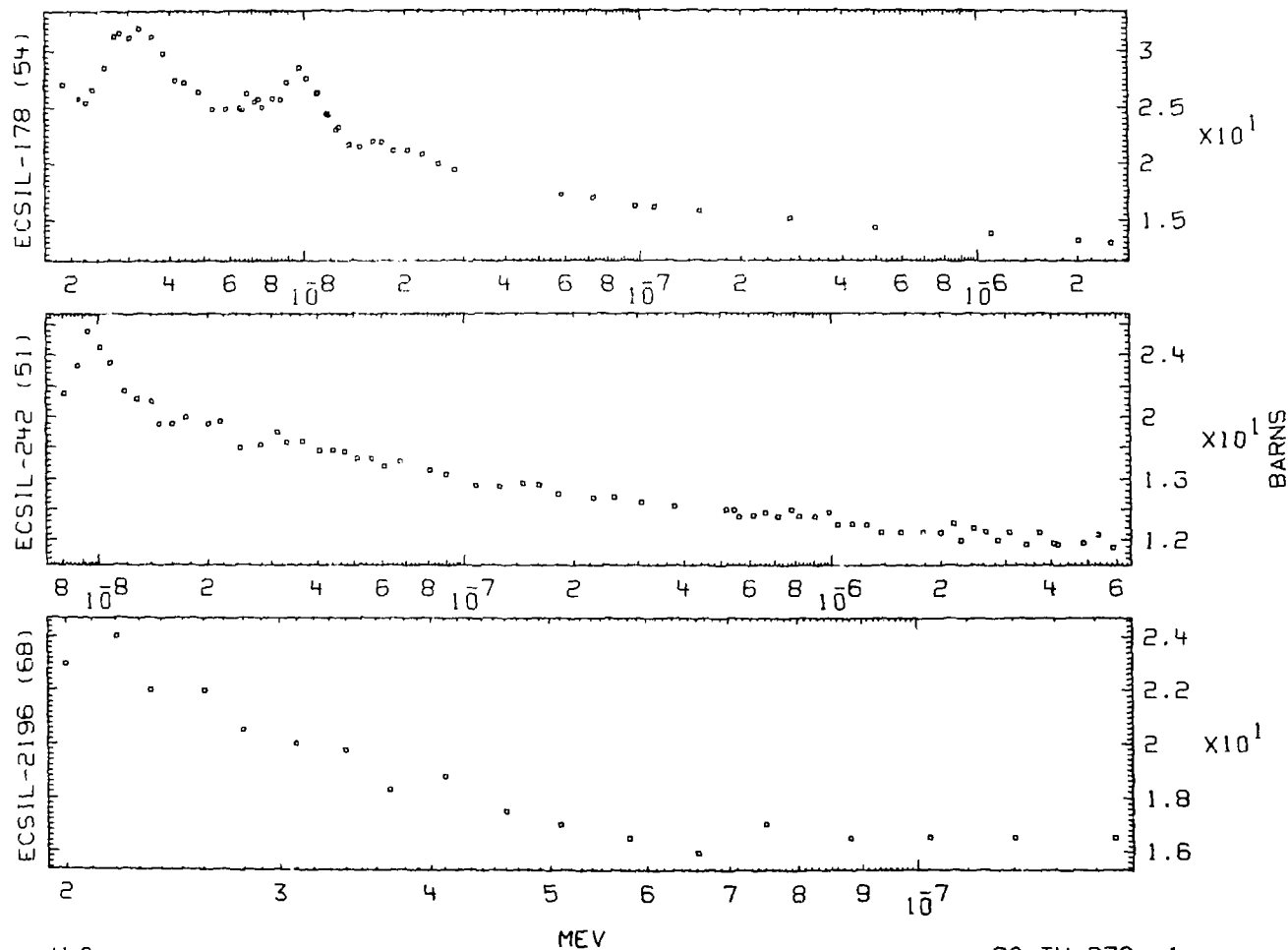
90-TH-231

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
70 2273	1.5000+ 0	1.2500- 1	2.2000- 1	4.4000- 2
70 2273	1.7500+ 0	1.2500- 1	2.0000- 1	4.0000- 2
70 2273	2.0000+ 0	1.2500- 1	2.1000- 1	4.2000- 2

03/01/74

TOTAL
CROSS SECTION

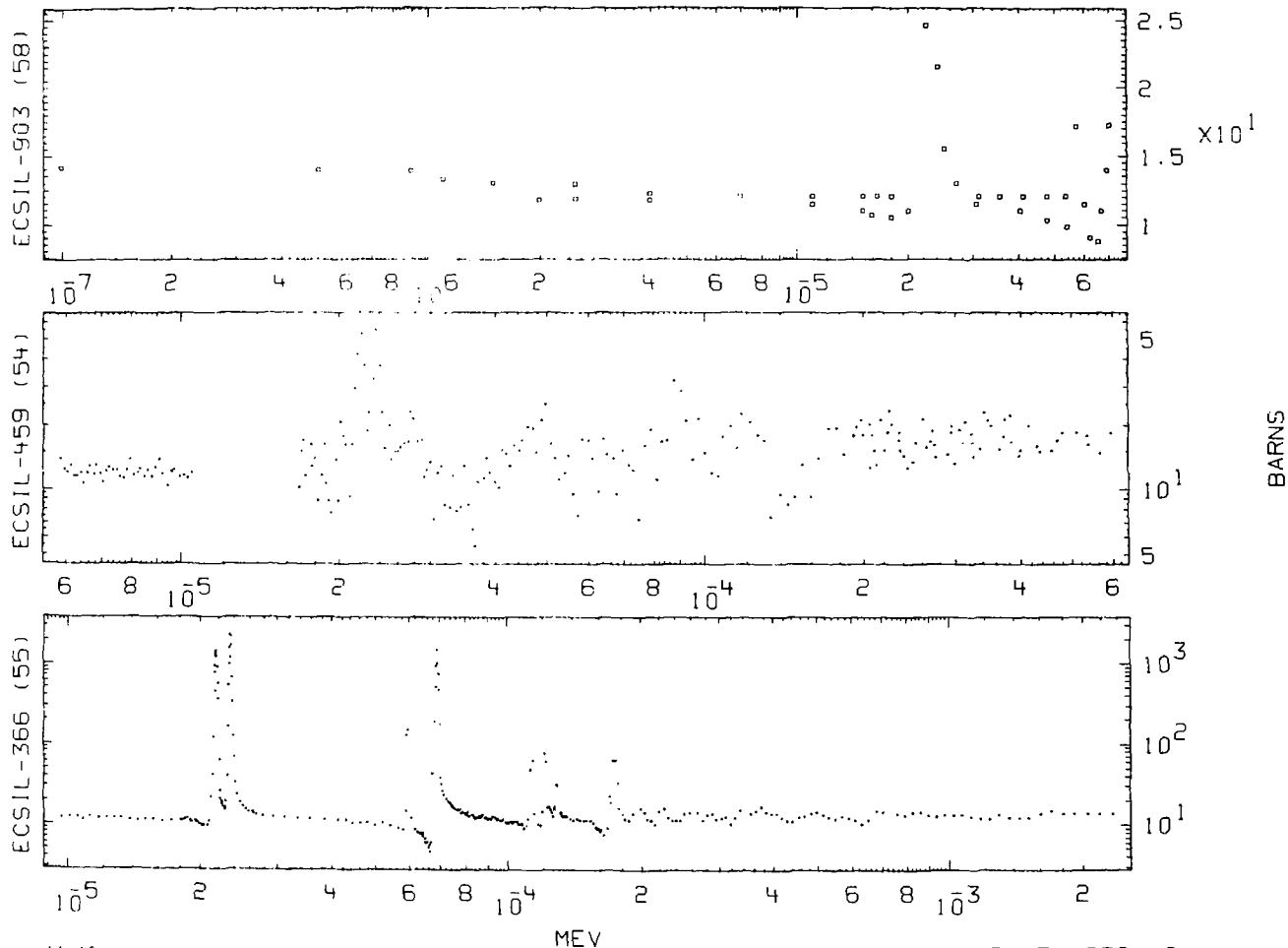
90-TH-232



03/01/74

TOTAL
CROSS SECTION

90-TH-232

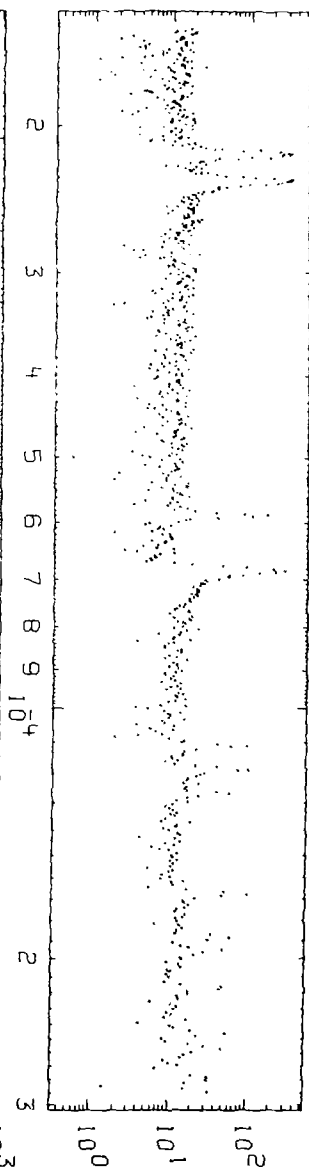


03/01/74

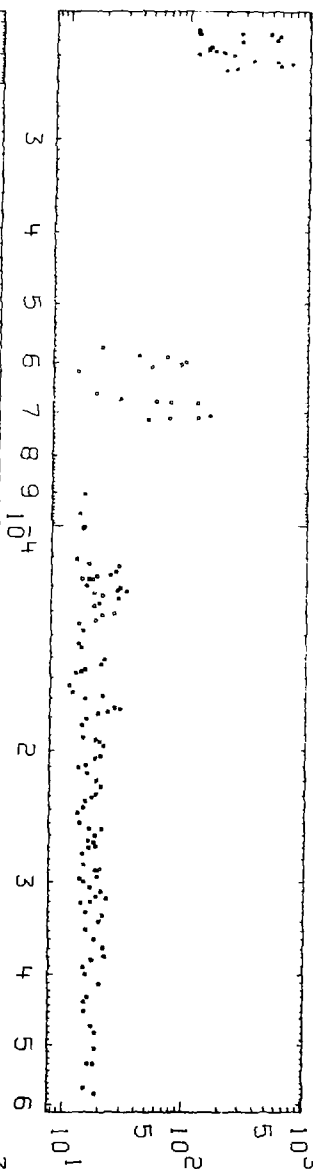
TOTAL
CROSS SECTION

90-TH-232

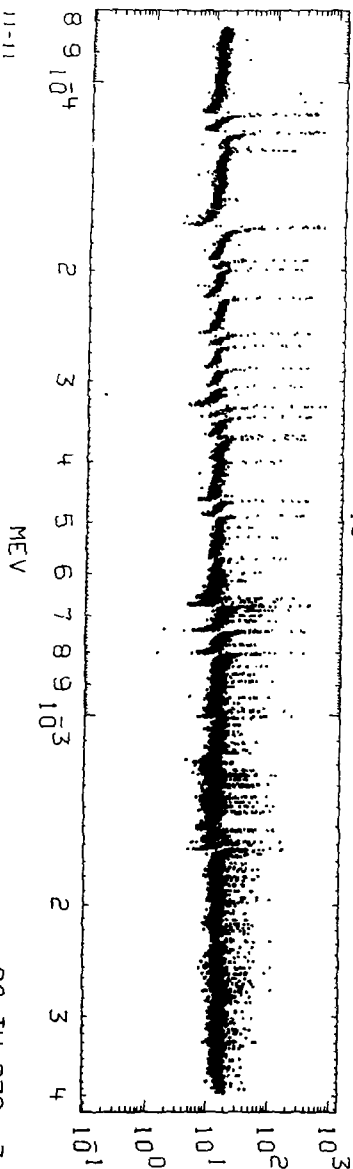
ECSIL-371 (64)



ECSIL-520 (55)



(EXPANDED BELOW)
ECSIL-814 (65)



BARNs

11-11

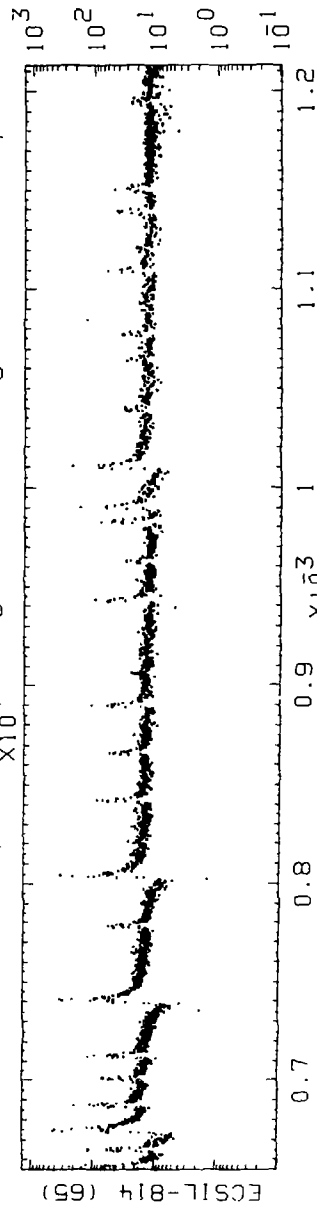
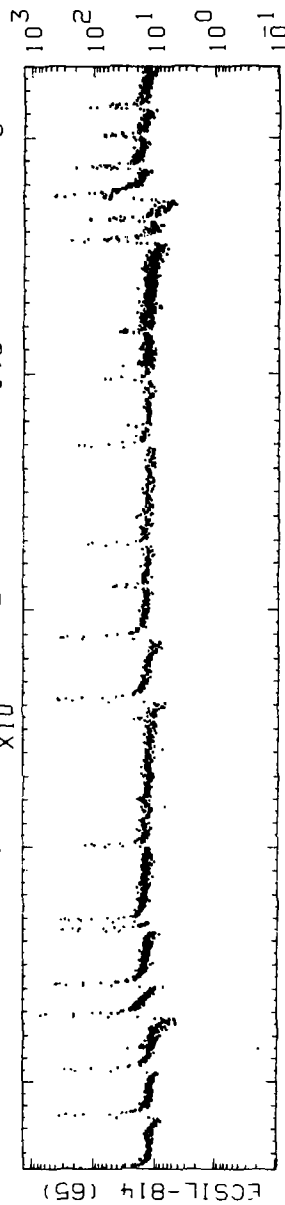
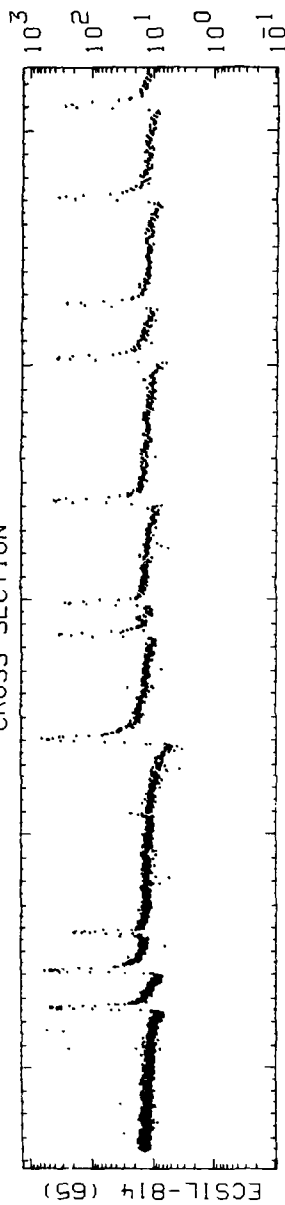
MEV

90-TH-232 -3

03/01/74

90-TH-232

TOTAL
CROSS SECTION

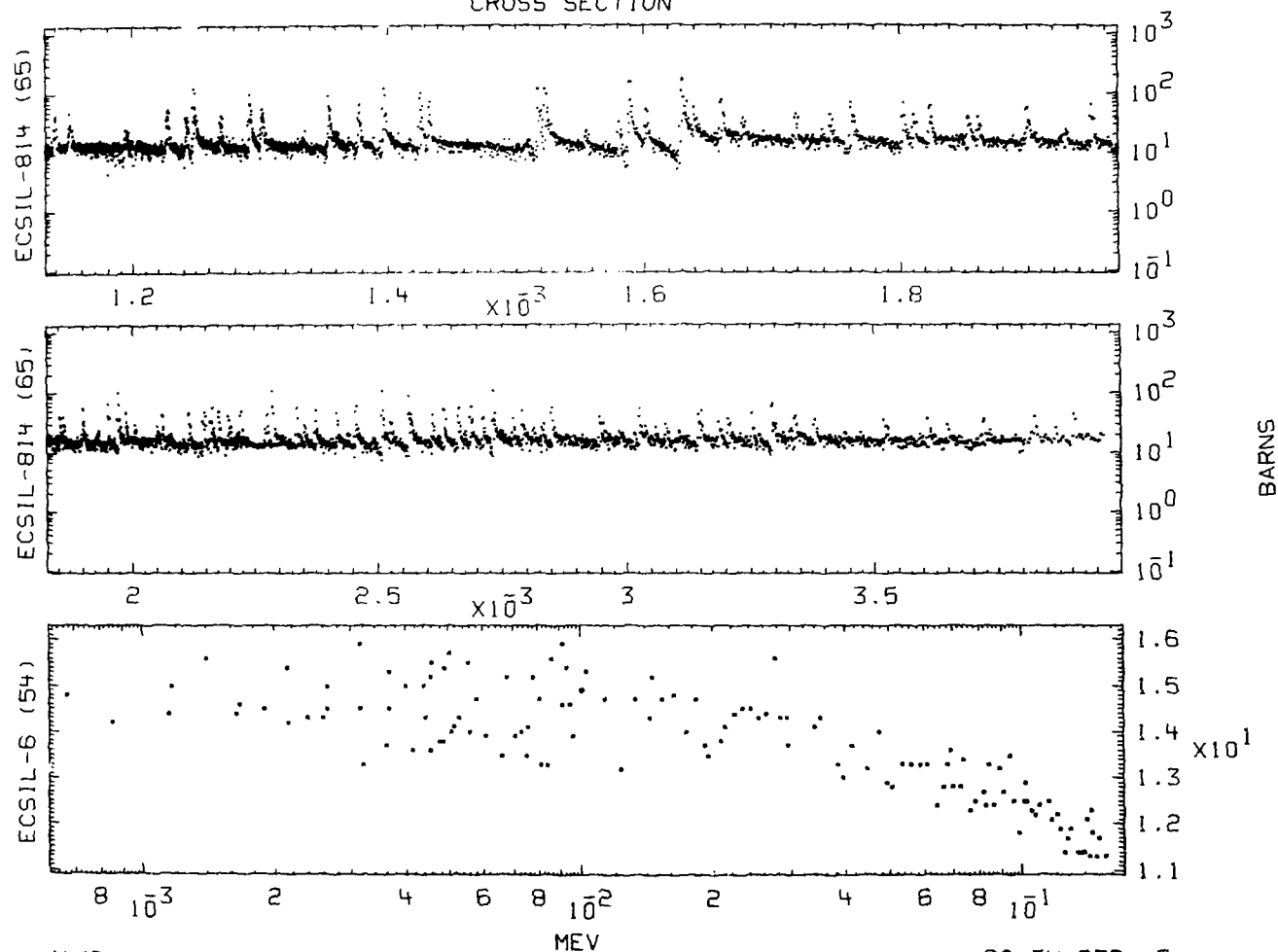


BARNs

03/01/74

TOTAL
CROSS SECTION

90-TH-232



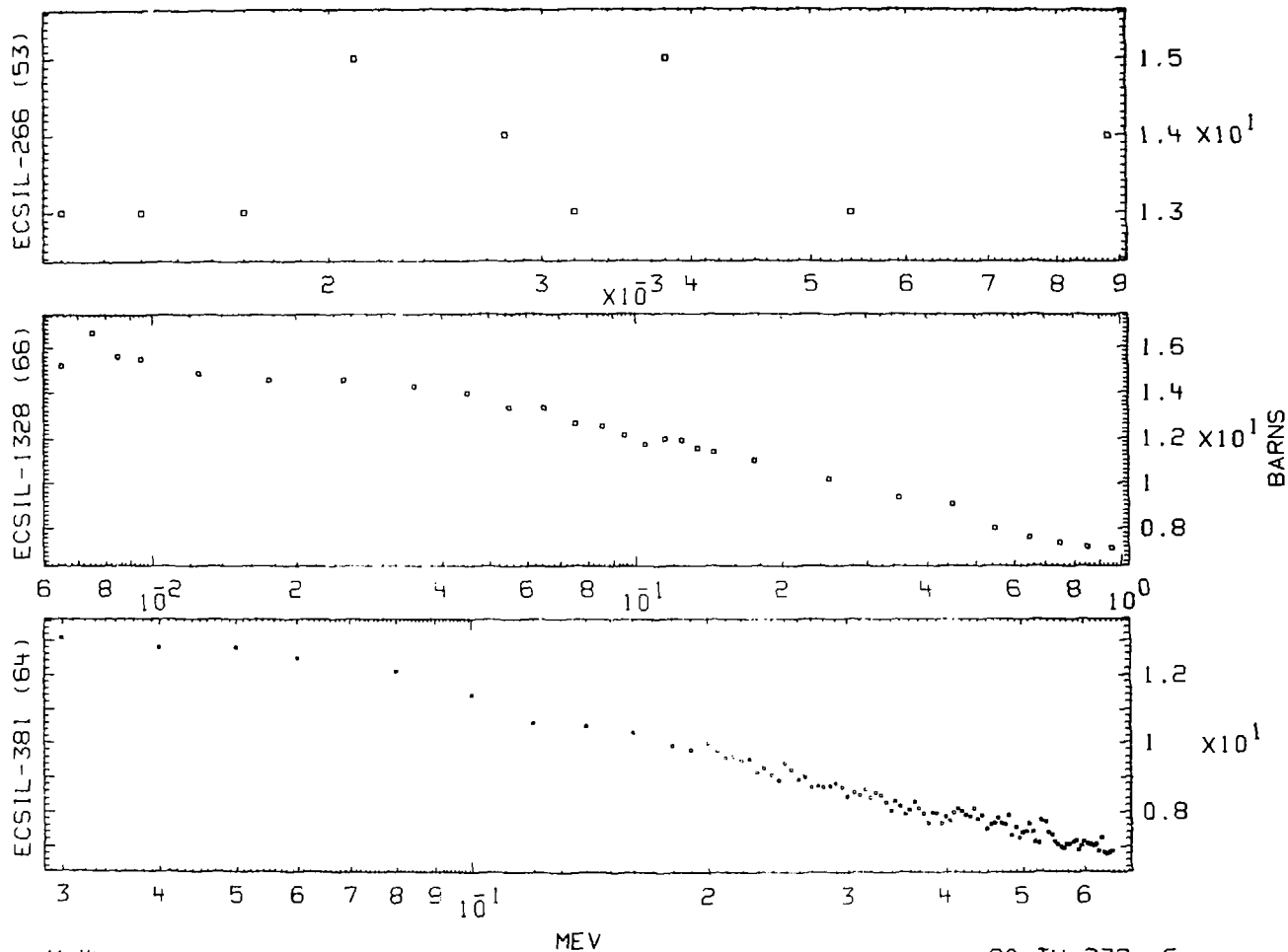
11-13

90-TH-232 -5

03/01/74

TOTAL
CROSS SECTION

90-TH-232



11-14

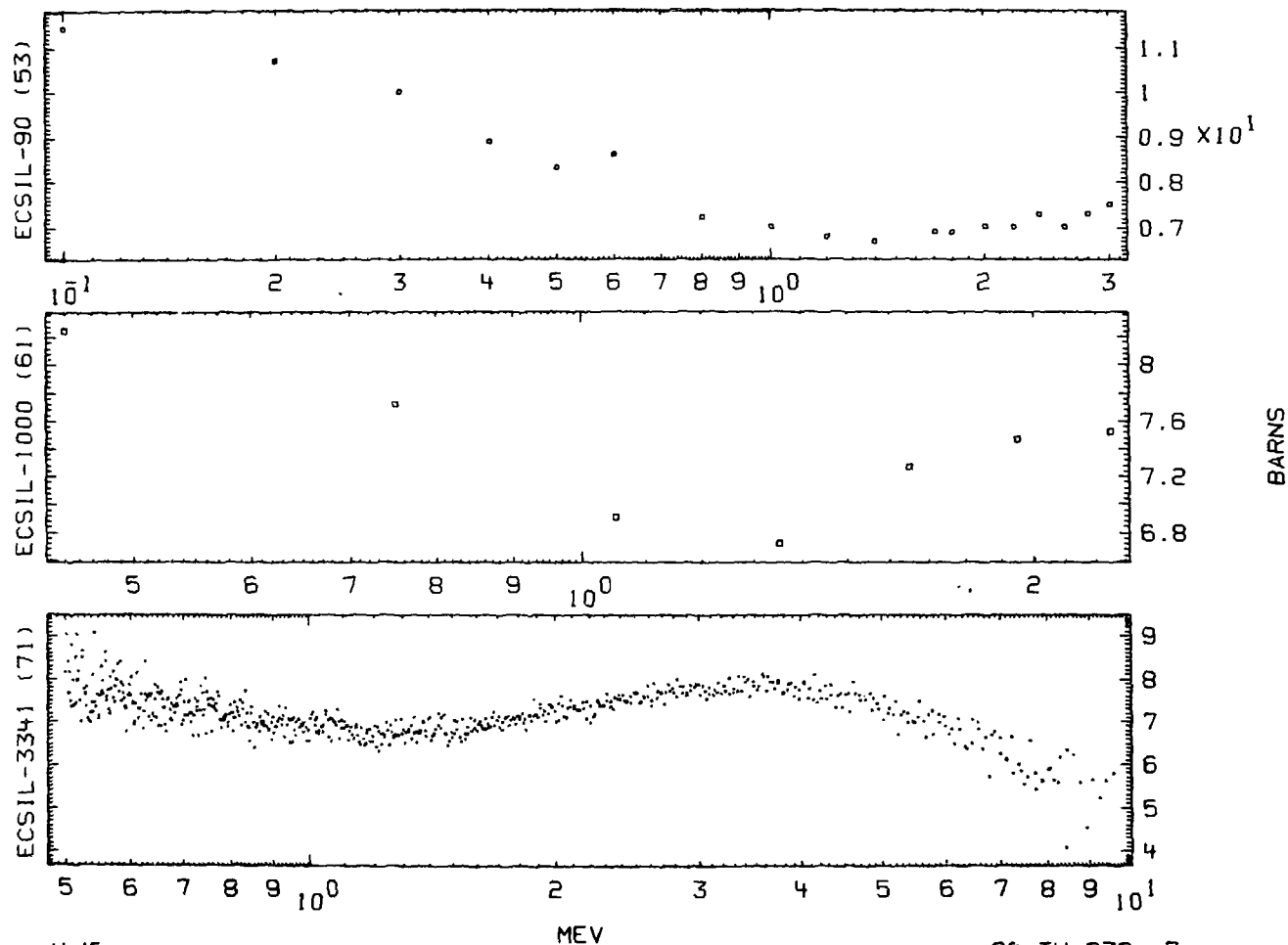
MEV

90-TH-232 -6

03/01/74

TOTAL CROSS SECTION

90-TH-232



11-15

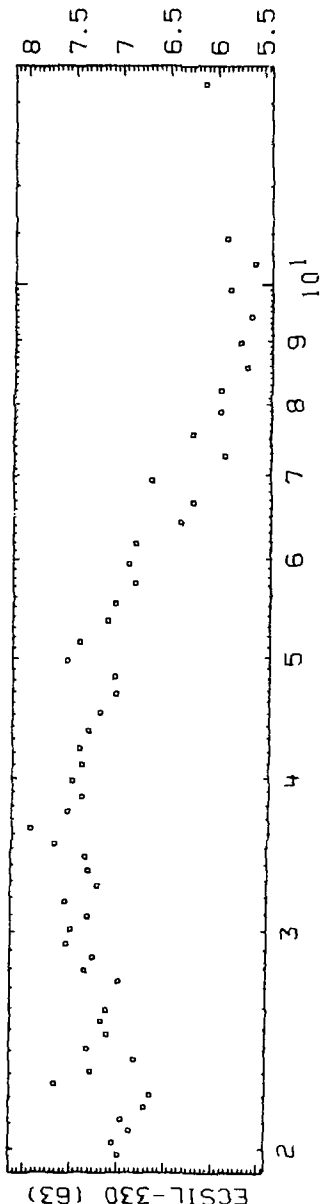
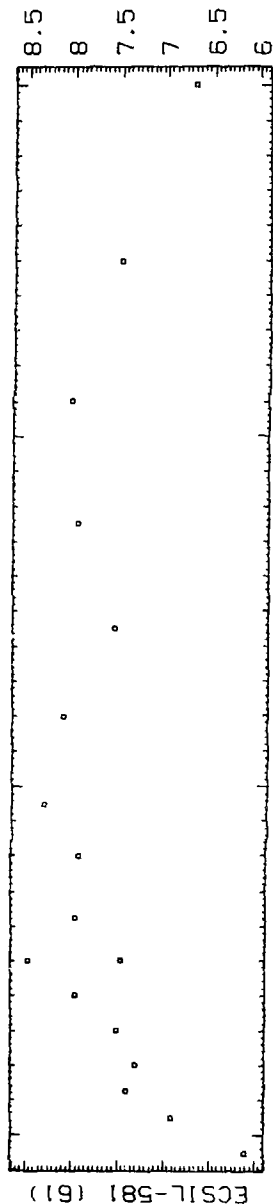
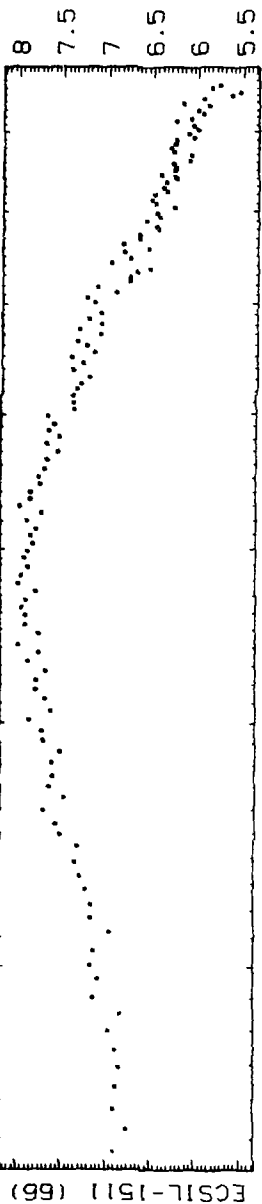
MEV

90-TH-232 -7

03/01/74

90-TH-232

TOTAL CROSS SECTION



11-16

MEV

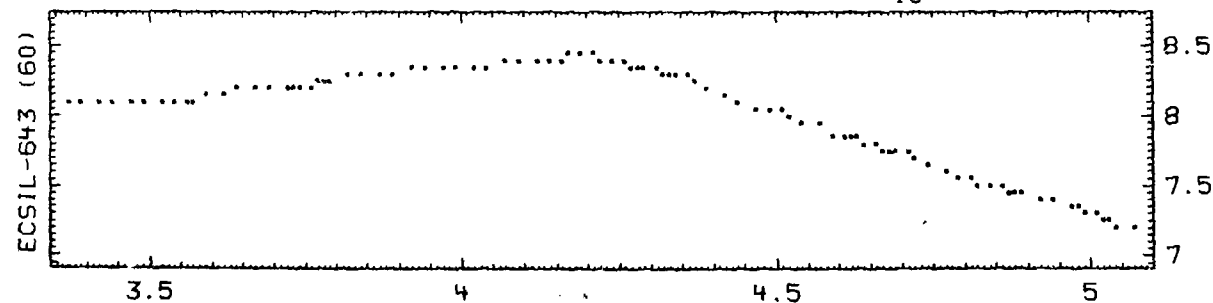
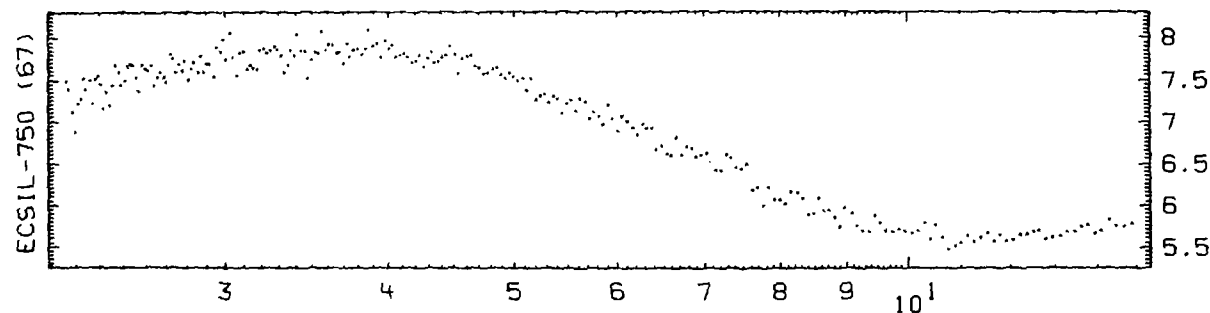
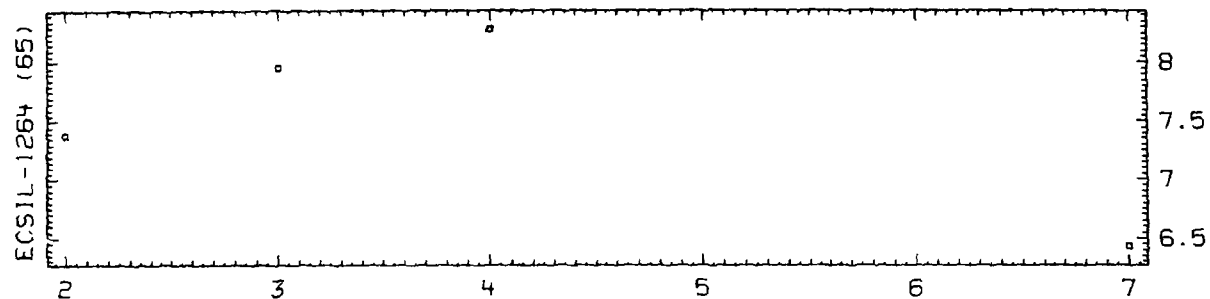
90-TH-232 -8

BARNs

03/01/74

TOTAL
CROSS SECTION

90-TH-232



BARN

11-17

MEV

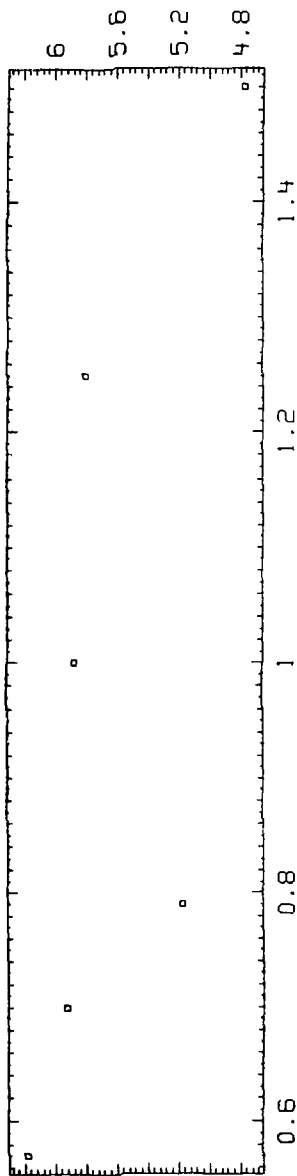
90-TH-232 -9

03/01/74

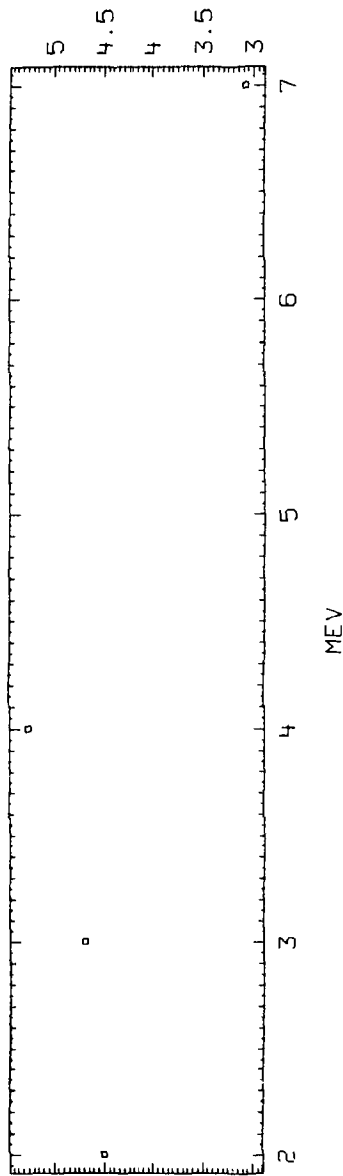
90-TH-232

ELASTIC CROSS SECTION

ECSTL-693 (62)



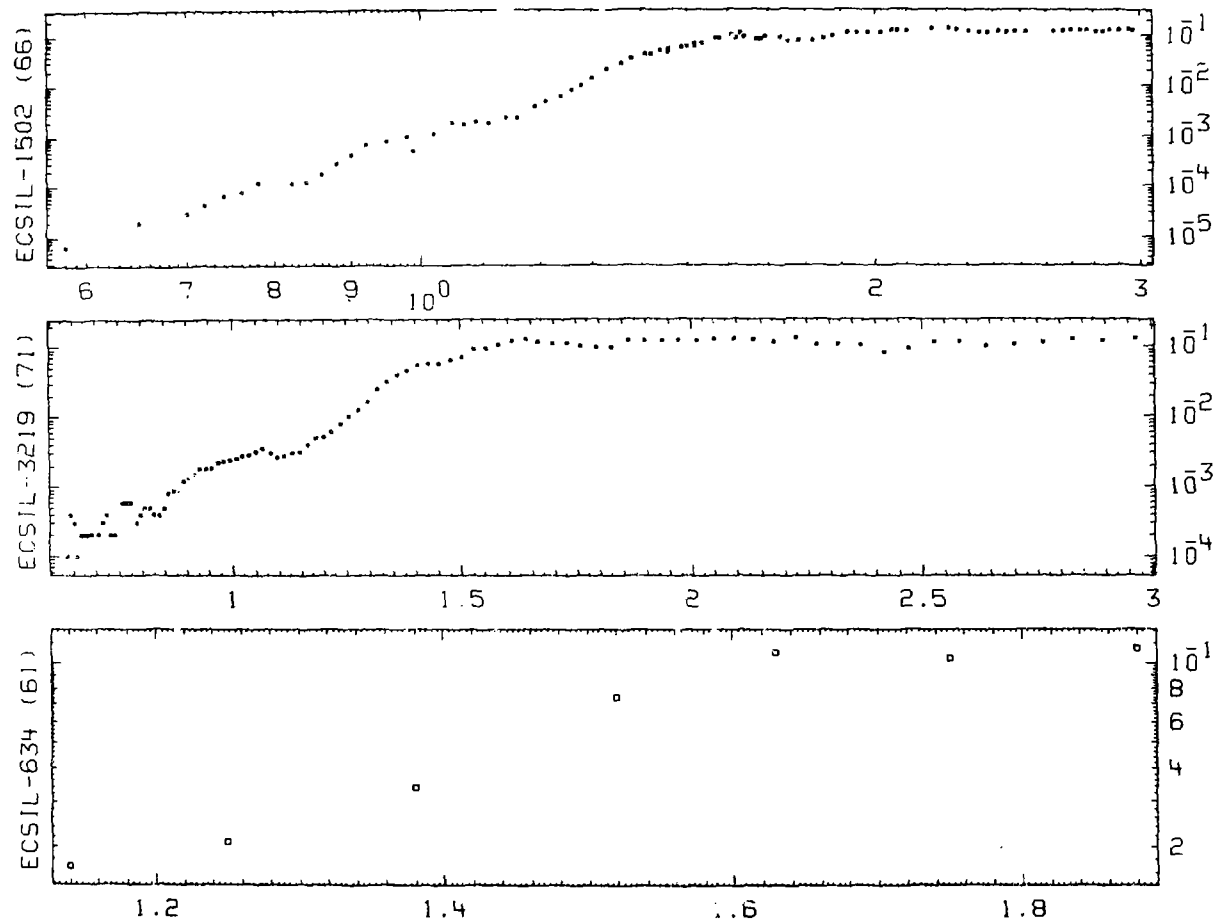
ECSTL-1264 (55)



03/01/74

FISSION
CROSS SECTION

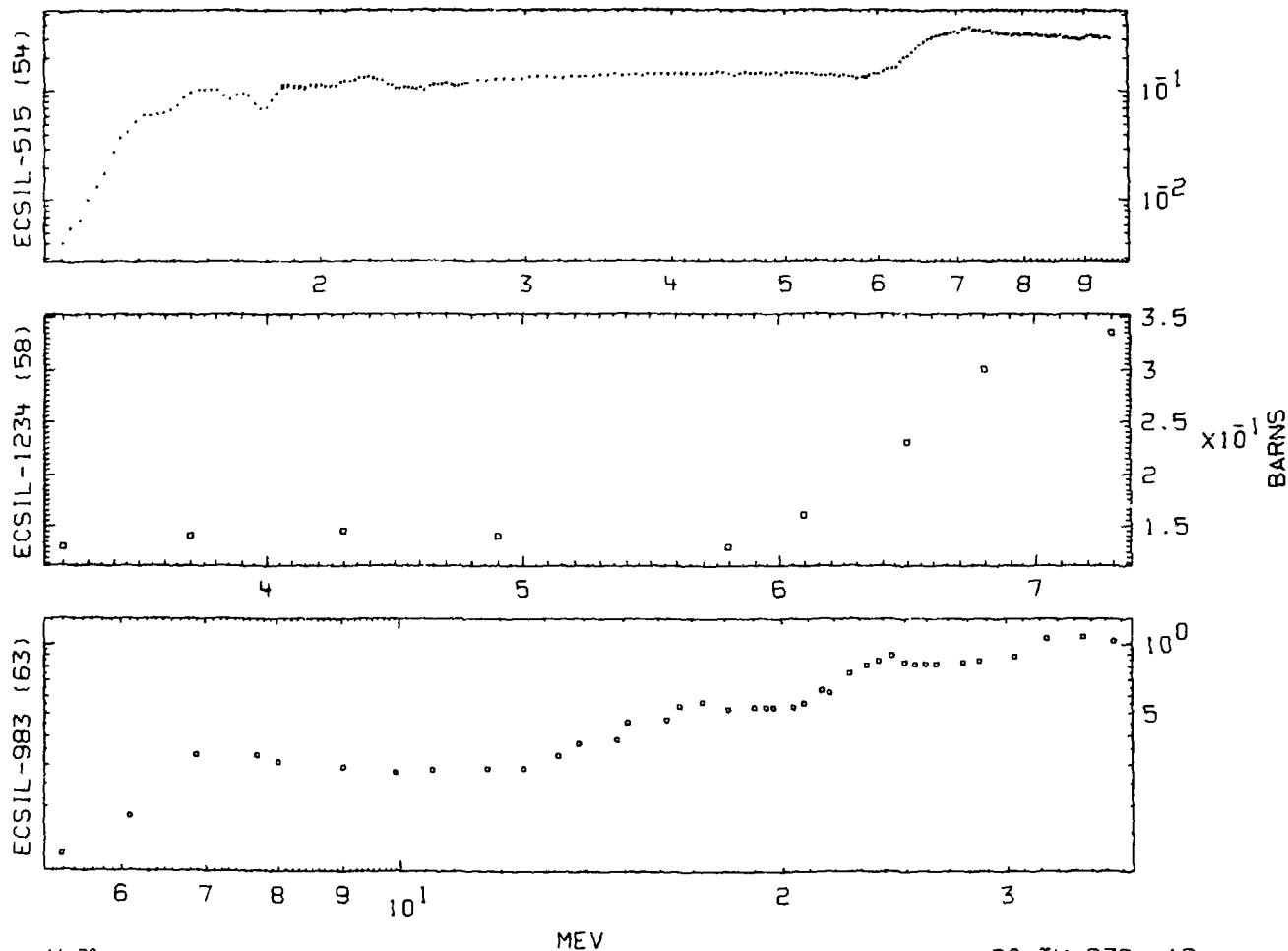
90-TH-232



03/01/74

FISSION
CROSS SECTION

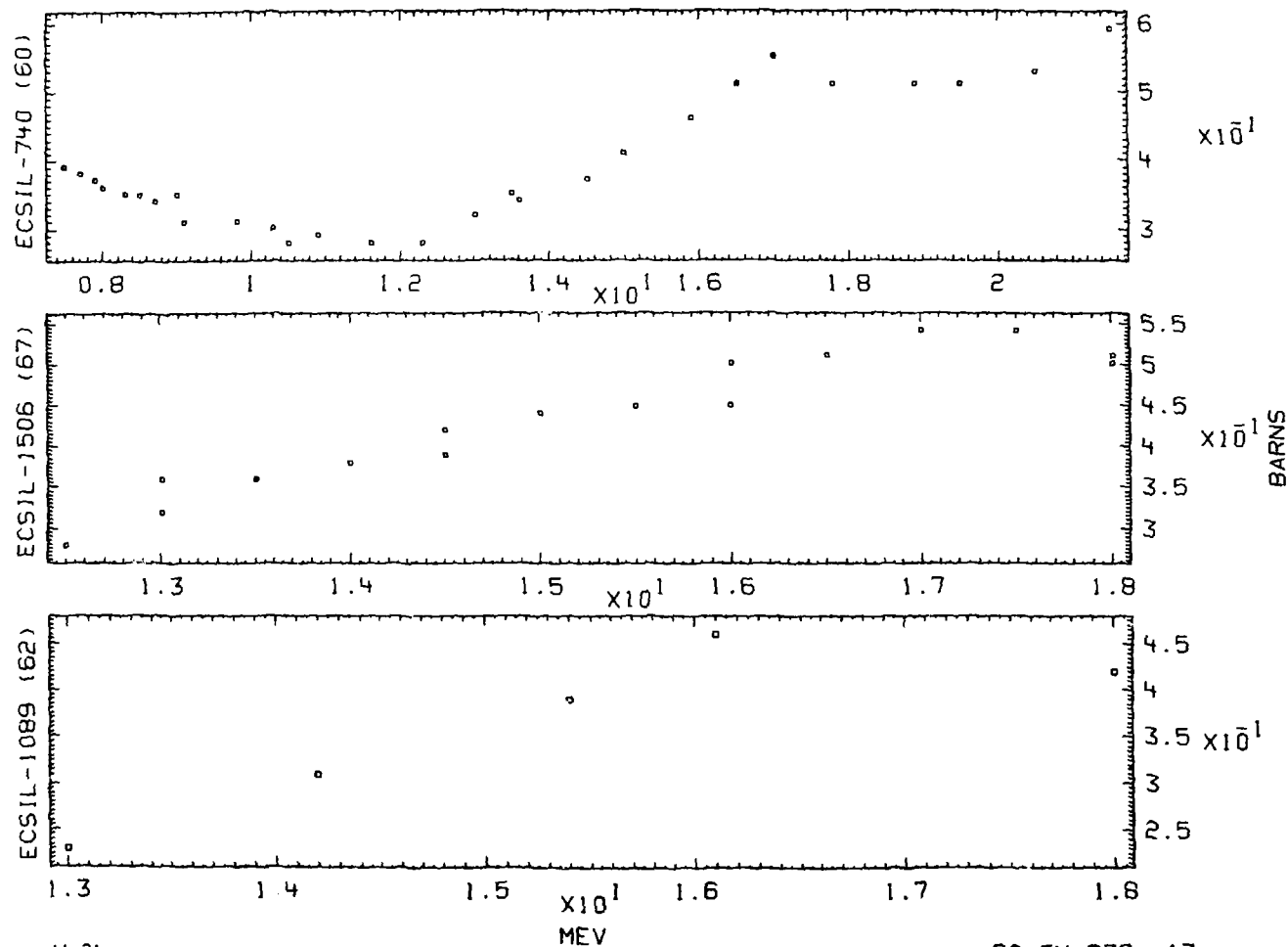
90-TH-232



03/01/74

FISSION
CROSS SECTION

90-TH-232



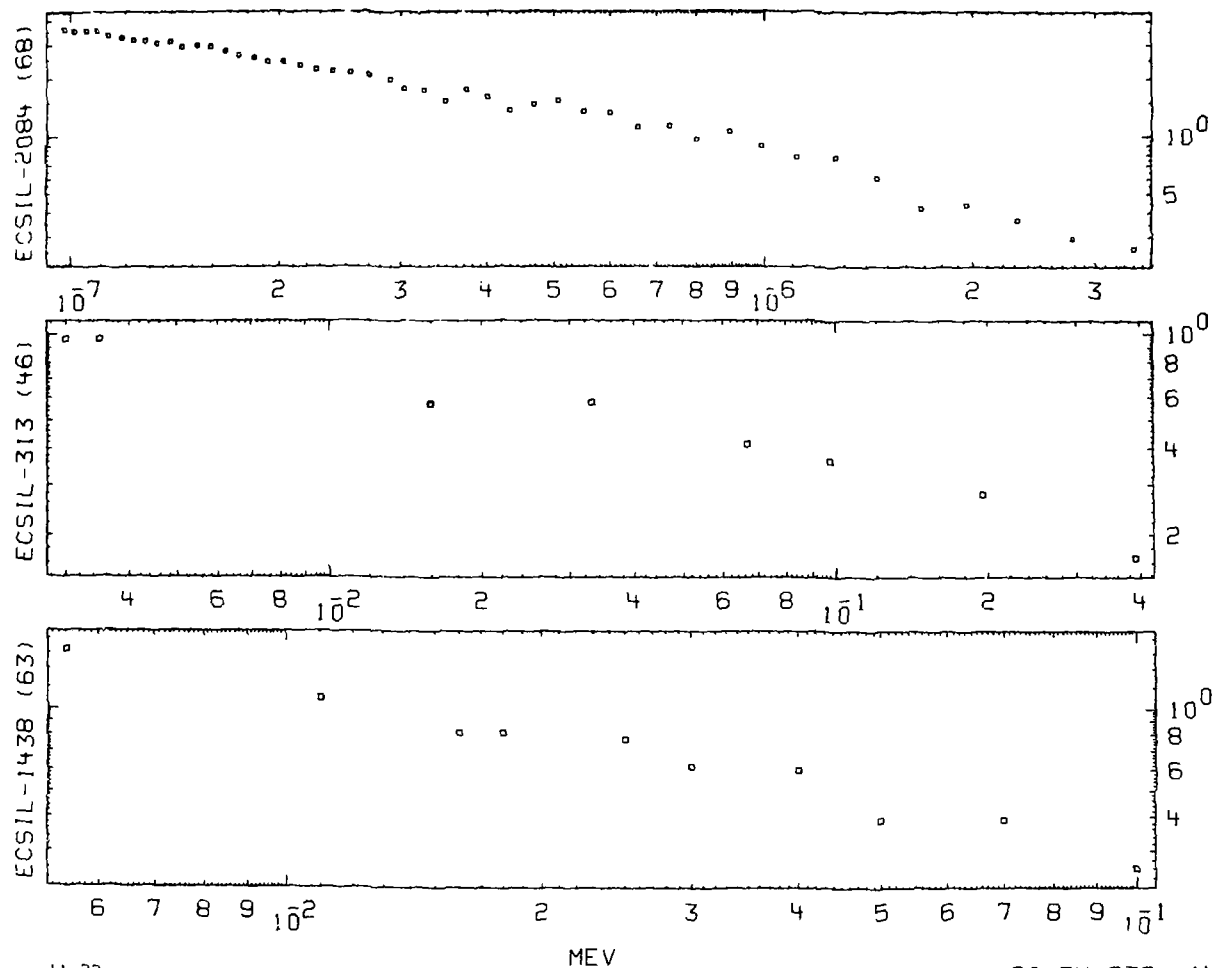
11-21

90-TH-232 -13

03/01/74

N, GAMMA
CROSS SECTION

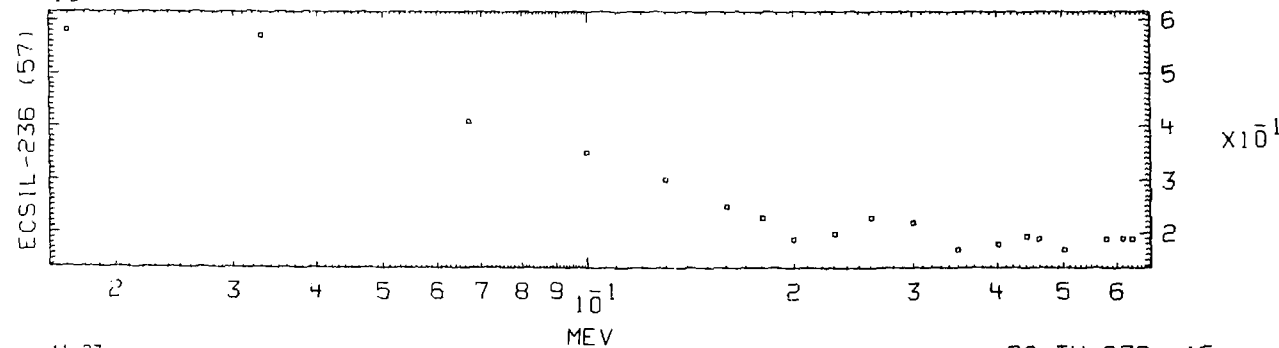
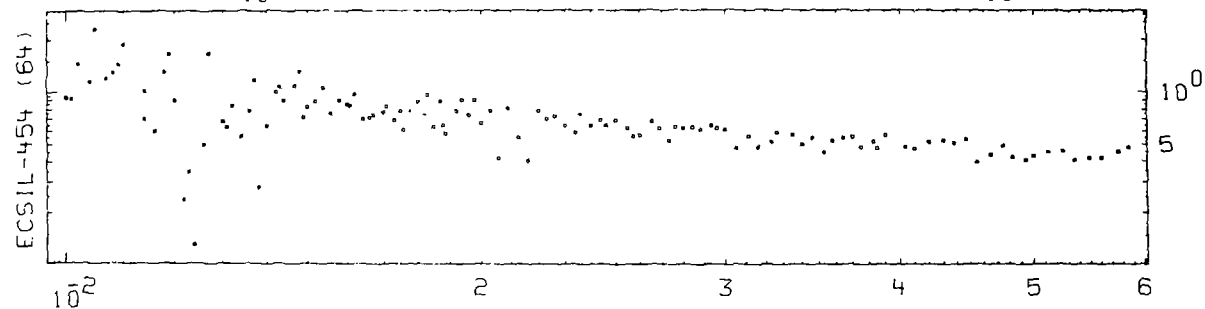
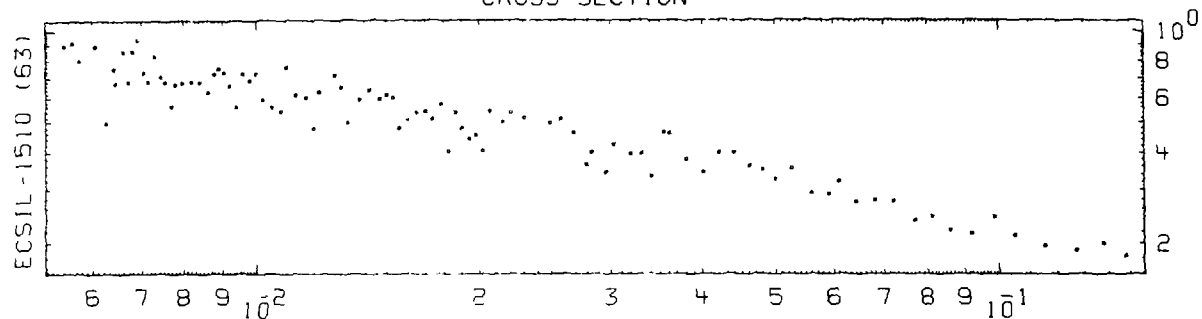
90-TH-232



03/01/74

N, GAMMA
CROSS SECTION

90-TH-232



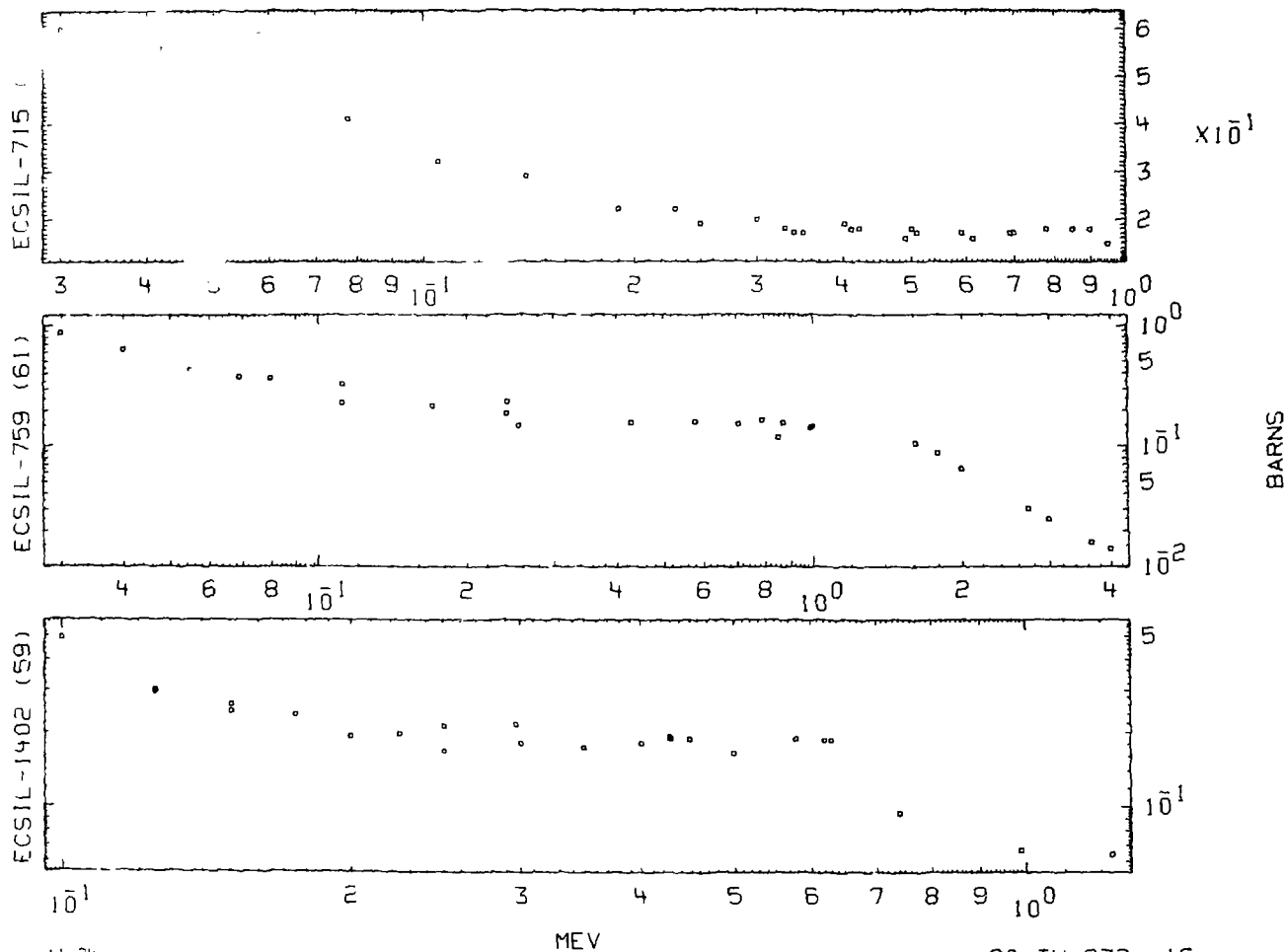
11-23

90-TH-232 -15

03/01/74

N, GAMMA
CROSS SECTION

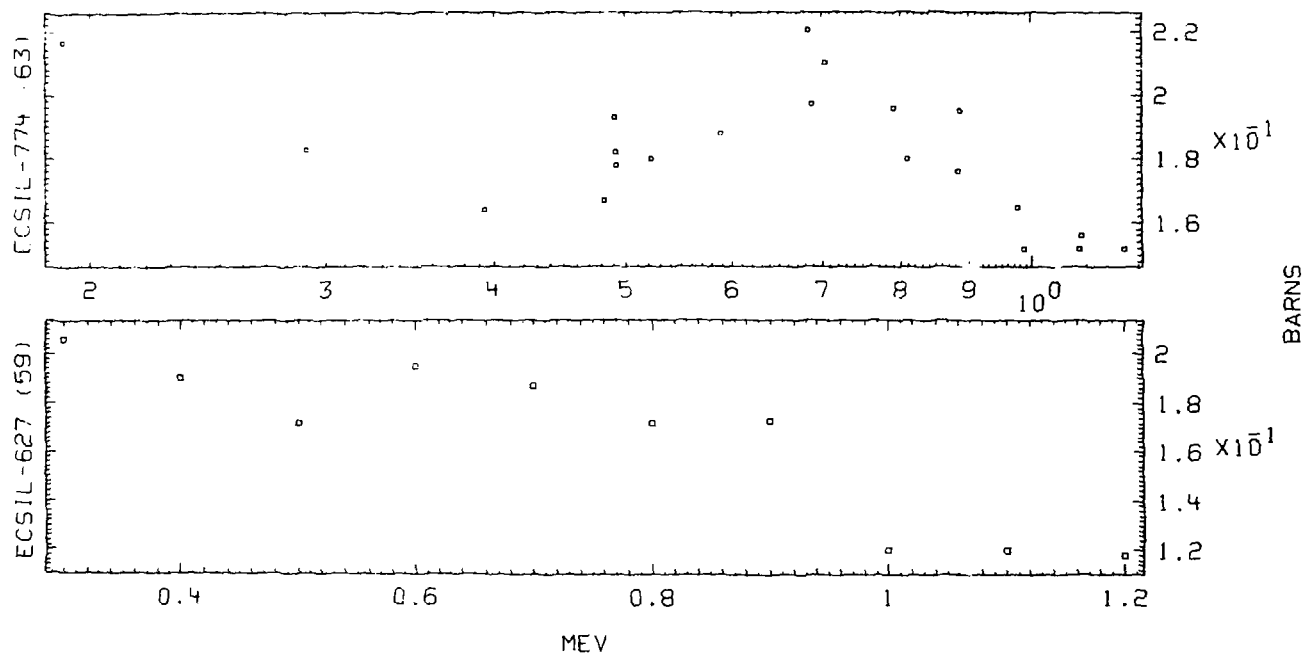
90-TH-232



03/01/74

N. GAMMA
CROSS SECTION

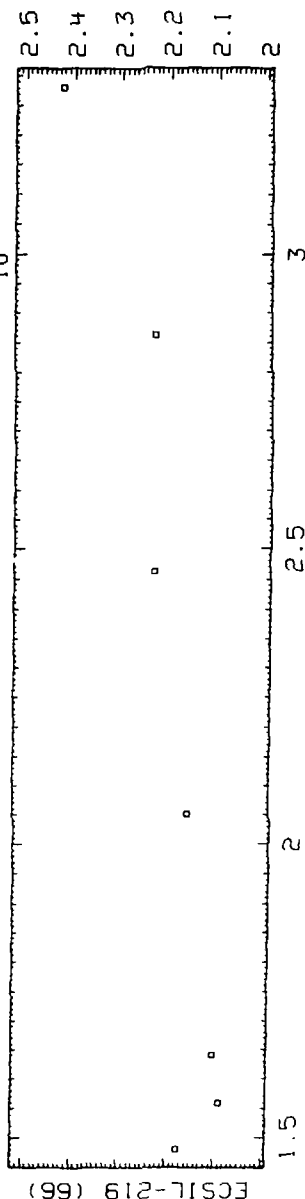
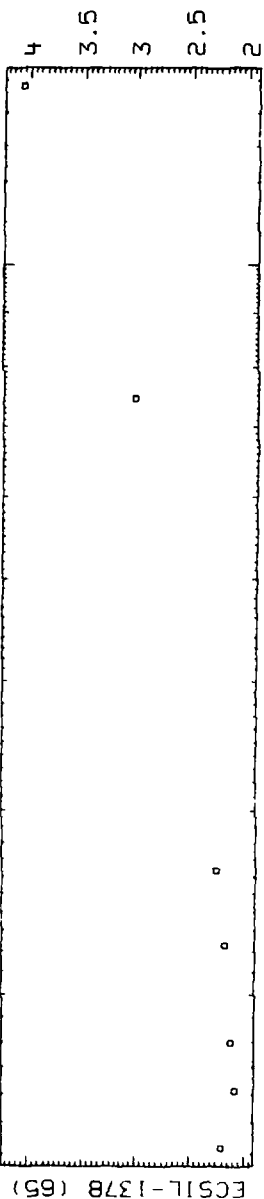
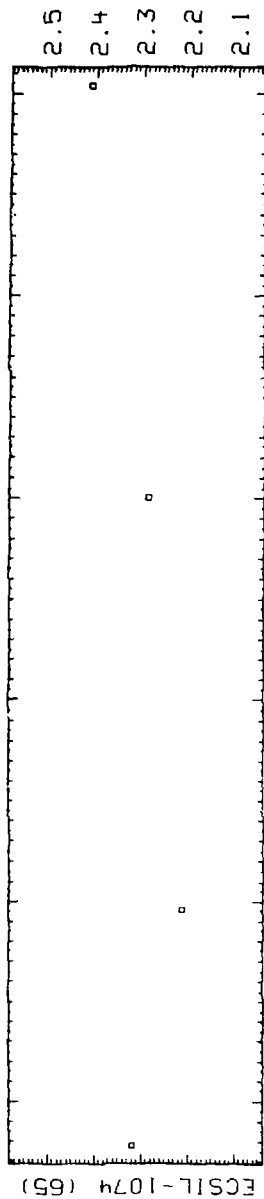
90-TH-232



03/01/74

NEUTRONS/FISSION
PROMPT

90-TH-232



11-26

MEV

90-TH-232 -18

03/01/74

TOTAL
CROSS SECTION

90-TH-232

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65	949 1.4400+ 6		1.3280+ 1	6.0000- 2	61	237 2.8400+ 1		5.4910+ 0	3.4000- 1
52	81 1.4000+ 1		5.6910+ 0	1.1000- 1	50	281 4.2000+ 1	1.0000+ 0	5.0310+ 0	7.0010- 2

03/01/74

ELASTIC

90-TH-232

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
54	103 1.0000+ 0	8.0000- 2	5.3000+ 0	7.9500- 1	61	846 3.1000+ 0		3.7000+ 0	1.0000- 1
65	1509 2.0000+ 0	5.0000- 2	5.0000+ 0						

03/01/74

FISSION

90-TH-232

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58	2192 1.2000+ 0	2.0000- 2	3.5000- 3	3.0000- 4	69	2354 1.4600+ 1	2.0000- 1	4.5000- 1	4.0000- 2
68	2192 1.4000+ 0	2.0000- 2	5.5400- 2	3.7000- 3	69	2354 1.4600+ 1	2.0000- 1	5.6000- 1	1.4000- 1
68	2192 1.6000+ 0	2.0000- 2	1.1780- 1	7.0000- 3	58	608 1.4600+ 1		3.7000- 1	2.0000- 2
50	1413 1.4000+ 1		3.4000- 1	1.0000- 2	58	528 1.4600+ 1		3.5000- 1	2.0000- 2
56	771 1.4100+ 1		3.4700- 1	1.8000- 2	55	461 3.8000+ 2		9.0000- 1	

03/01/74

N, GAMMA

90-TH-232

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
57	337 2.5300- 8		7.6000+ 0	1.6000- 1	58	363 2.0000- 1	1.5000- 2	2.1700- 1	1.1000- 2
55	191 2.5300- 8		7.3100+ 0	1.2000- 1	58	363 2.0000- 1		2.1000- 1	4.0000- 2
65	867 2.4000- 2		4.8000- 1	5.0000- 2	60	633 2.2000- 1	2.0000- 2	2.1300- 1	5.0000- 3
57	305 2.4000- 2	5.0000- 3	5.0000- 1	1.0000- 1	57	521 1.4500+ 1		5.2010- 3	8.0010- 4

03/01/74

PROMPT NEUTRONS/FISSION

90-TH-232

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
59	1151 1.4000+ 0		2.5800+ 0	2.0000- 1	61	1138 3.6000+ 0	3.0000- 1	2.4200+ 0	1.0000- 1
61	1079 2.3000+ 0		2.2600+ 0	1.0000- 1	61	1079 3.7500+ 0		2.4300+ 0	9.0000- 2

03/01/74

NEUTRONS/FISSION
PROMPT

90-TH-232

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
58 1447	4.0000+ 0		2.7000+ 0	1.0000- 1
56 1321	1.4100+ 1		3.5500+ 0	2.8000- 1
58 1330	1.4200+ 1		4.6400+ 0	2.0000- 1
61 1138	1.4900+ 1	3.0000- 1	4.4300+ 0	1.3000- 1
61 1079	1.5700+ 1		4.2500+ 0	1.3000- 1

03/01/74

DELAYED NEUTRONS/FISSION

90-TH-232

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
1 55 1341	2.0000+ 0	1.0000+ 0	3.7280- 2	8.6400- 3
59 1425	2.4000+ 0		5.4000- 2	4.0000- 3
69 1533	3.1000+ 0	2.0000- 1	6.0000- 2	6.0000- 3
59 1425	3.3000+ 0		5.1000- 2	4.0000- 3
68 2357	1.4000+ 1		1.9000- 2	5.0000- 3
61 1410	1.4000+ 1		6.7000- 2	1.5000- 2
61 1423	1.4500+ 1		7.5000- 2	7.0000- 3
69 1533	1.4900+ 1	5.0000- 1	3.1000- 2	3.0000- 3
59 1425	1.5000+ 1		8.2000- 2	6.0000- 3

03/01/74

NEUTRONS/NONELASTIC EVENT

90-TH-232

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
63 277	1.4000+ 1		2.3400+ 0	8.0000- 2

03/01/74

FISSION
CROSS SECTION

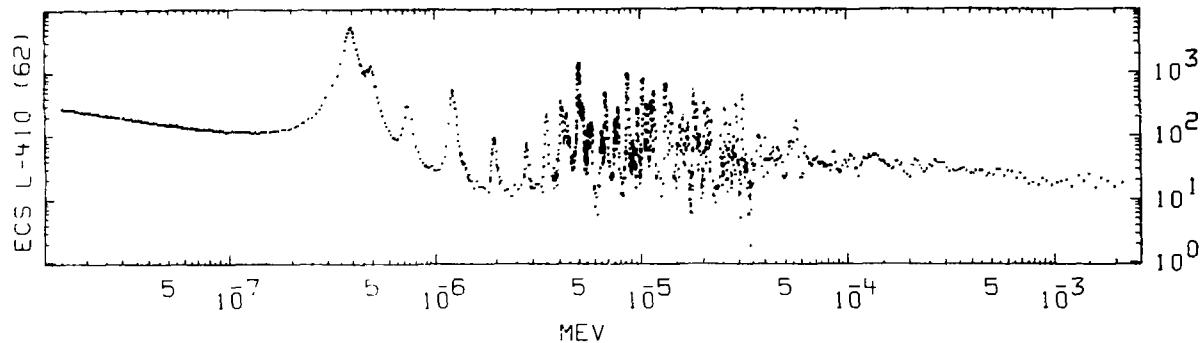
90-TH-233

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
70 2273 1.5000+ 0	1.2500- 1	1.2000- 1	2.4000- 2	
70 2273 1.7500+ 0	1.2500- 1	1.2000- 1	2.4000- 2	
70 2273 2.0000+ 0	1.2500- 1	1.2000- 1	2.4000- 2	

03/01/74

TOTAL
CROSS SECTION

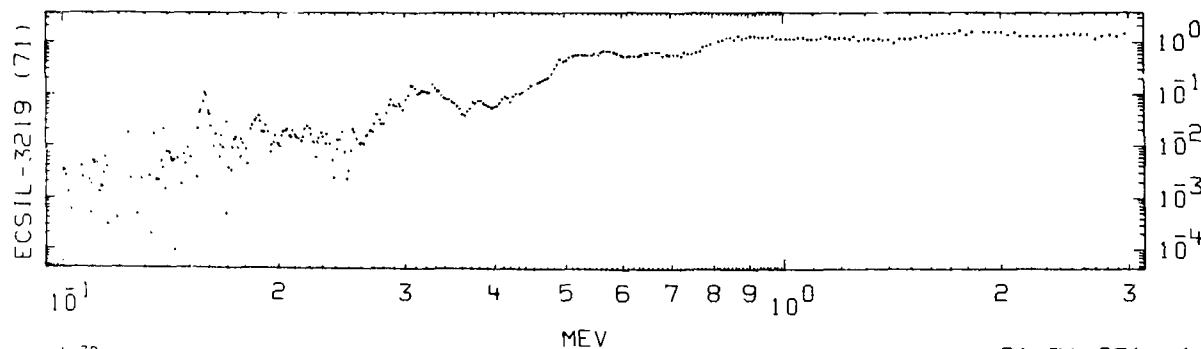
91-PA-231



03/01/74

FISSION
CROSS SECTION

91-PA-231



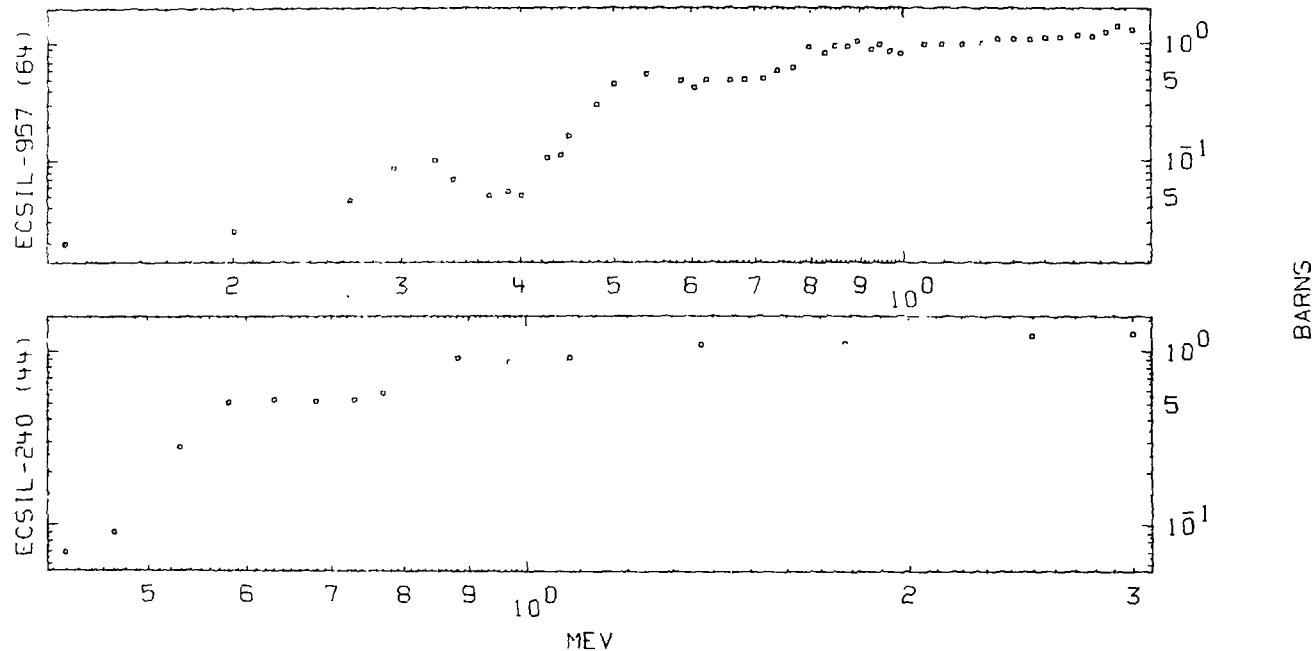
11-30

91-PA-231 -1

03/01/74

FISSION
CROSS SECTION

91-PA-231



03/01/74

FISSION

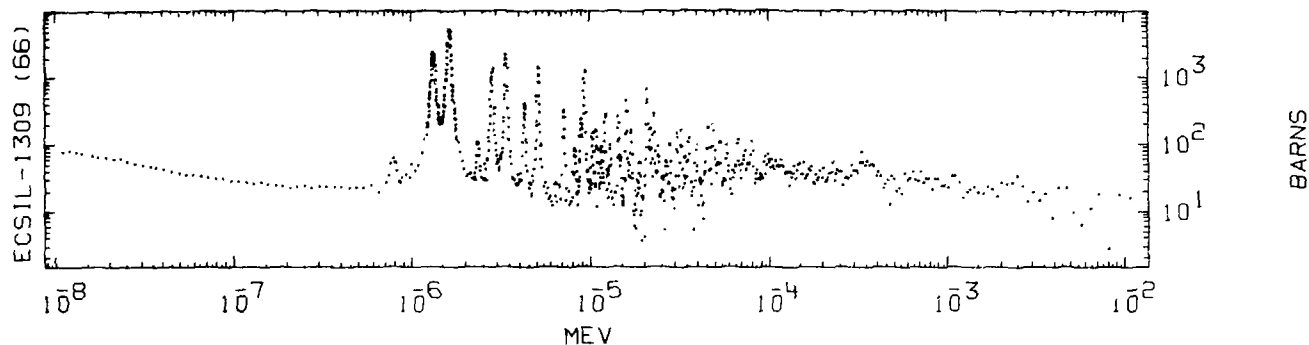
91-PA-231

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
69 2521	1.4800+ 1	3.0000- 1	1.4300+ 0	1.2000- 1

03/01/74

TOTAL
CROSS SECTION

91-PA-233



03/01/74

TOTAL

91-PA-233

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
67 1309	2.5300- 8		5.5000+ 1	3.0000+ 0

03/01/74

N, GAMMA

91-PA-233

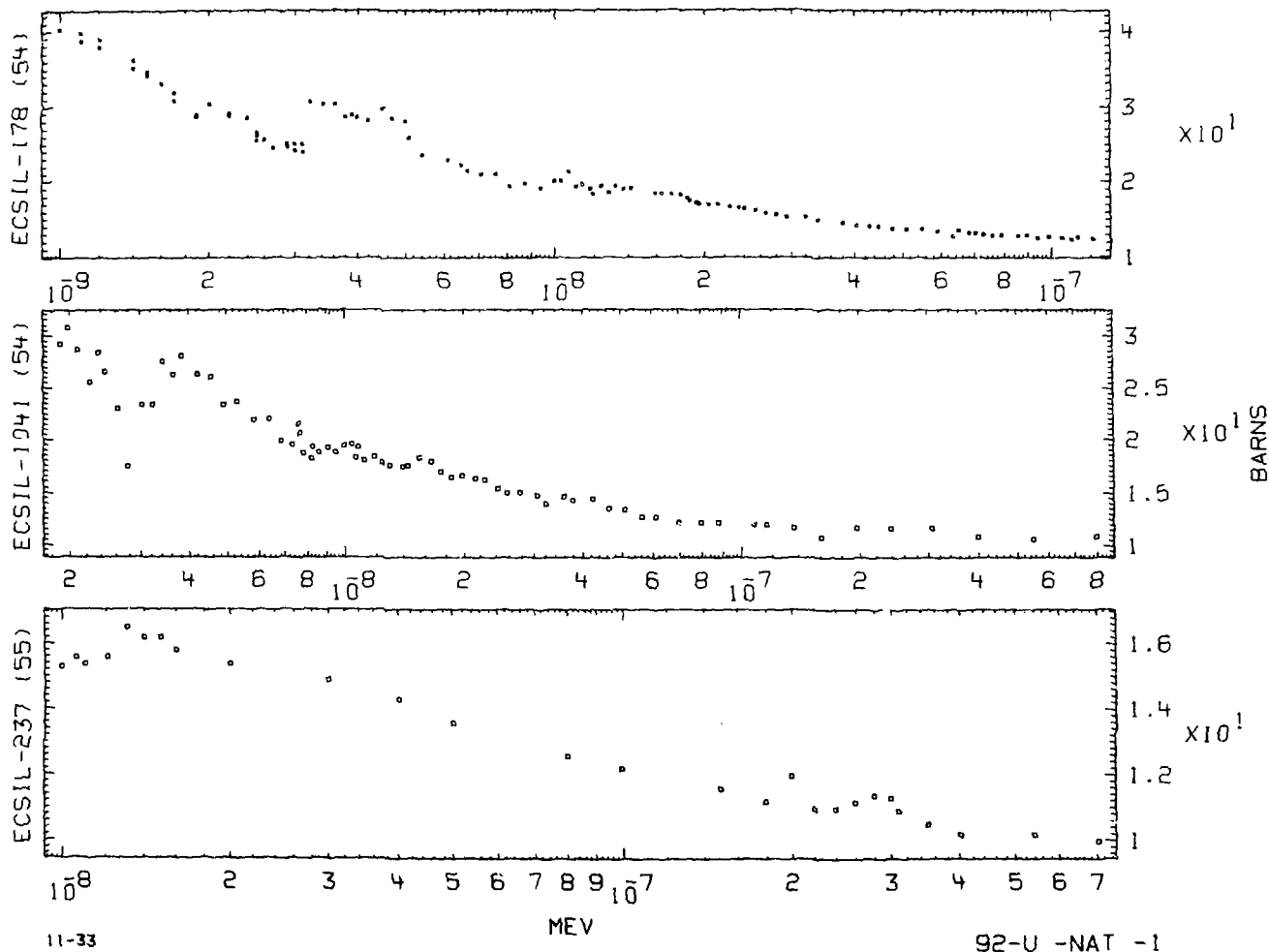
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
62 1483	2.5300- 8		4.6000+ 1	5.0000+ 0
70 2109	2.5300- 8		3.9500+ 1	1.2000+ 0

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA HALF-LIFE BARNs MINUTES
5B 1163	2.5300- 8		2.0000+ 1	4.0000+ 0 1.1800+ 0

03/01/74

TOTAL
CROSS SECTION

92-U -NAT



11-33

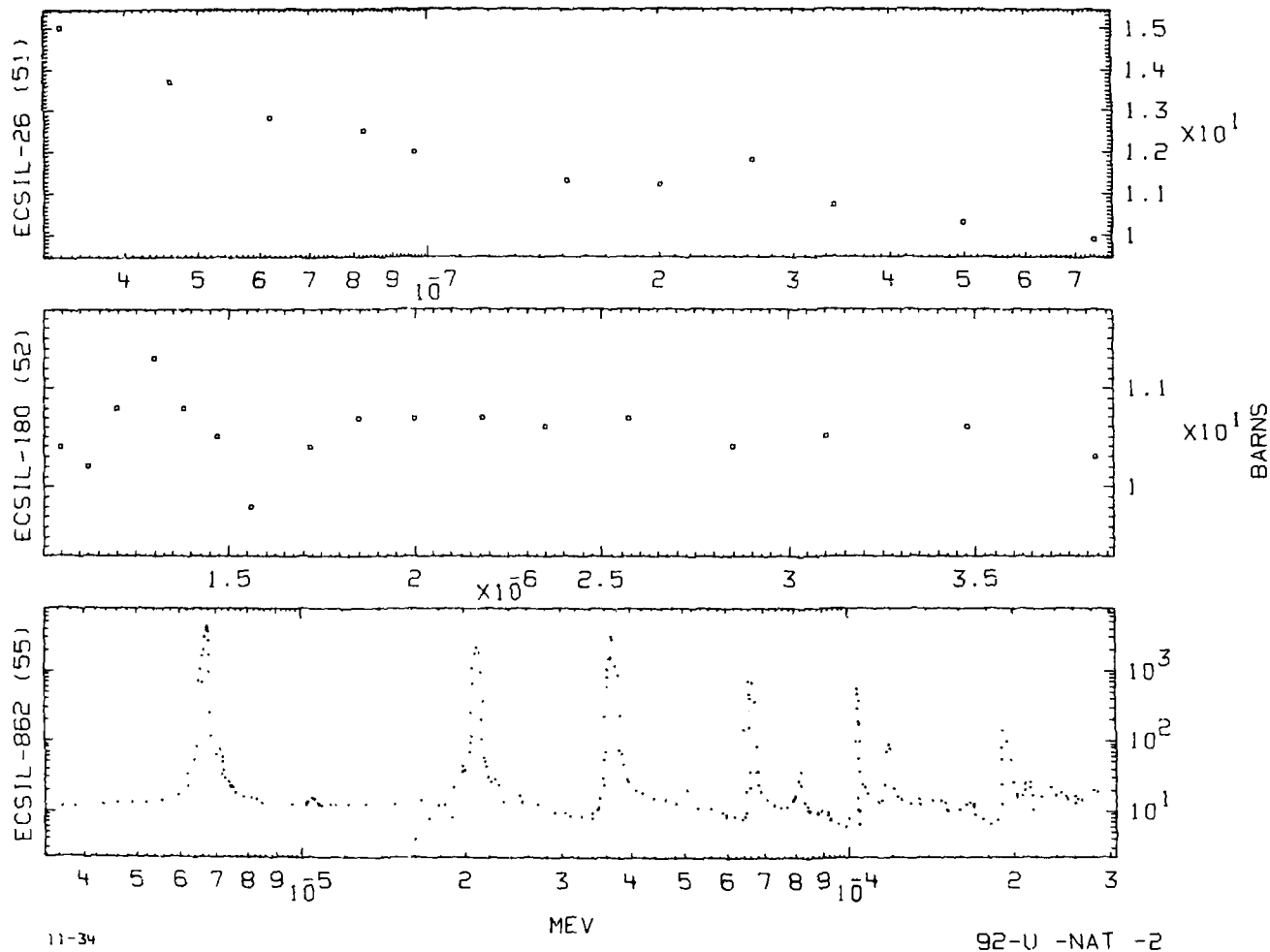
MEV

92-U -NAT -1

03/01/74

TOTAL
CROSS SECTION

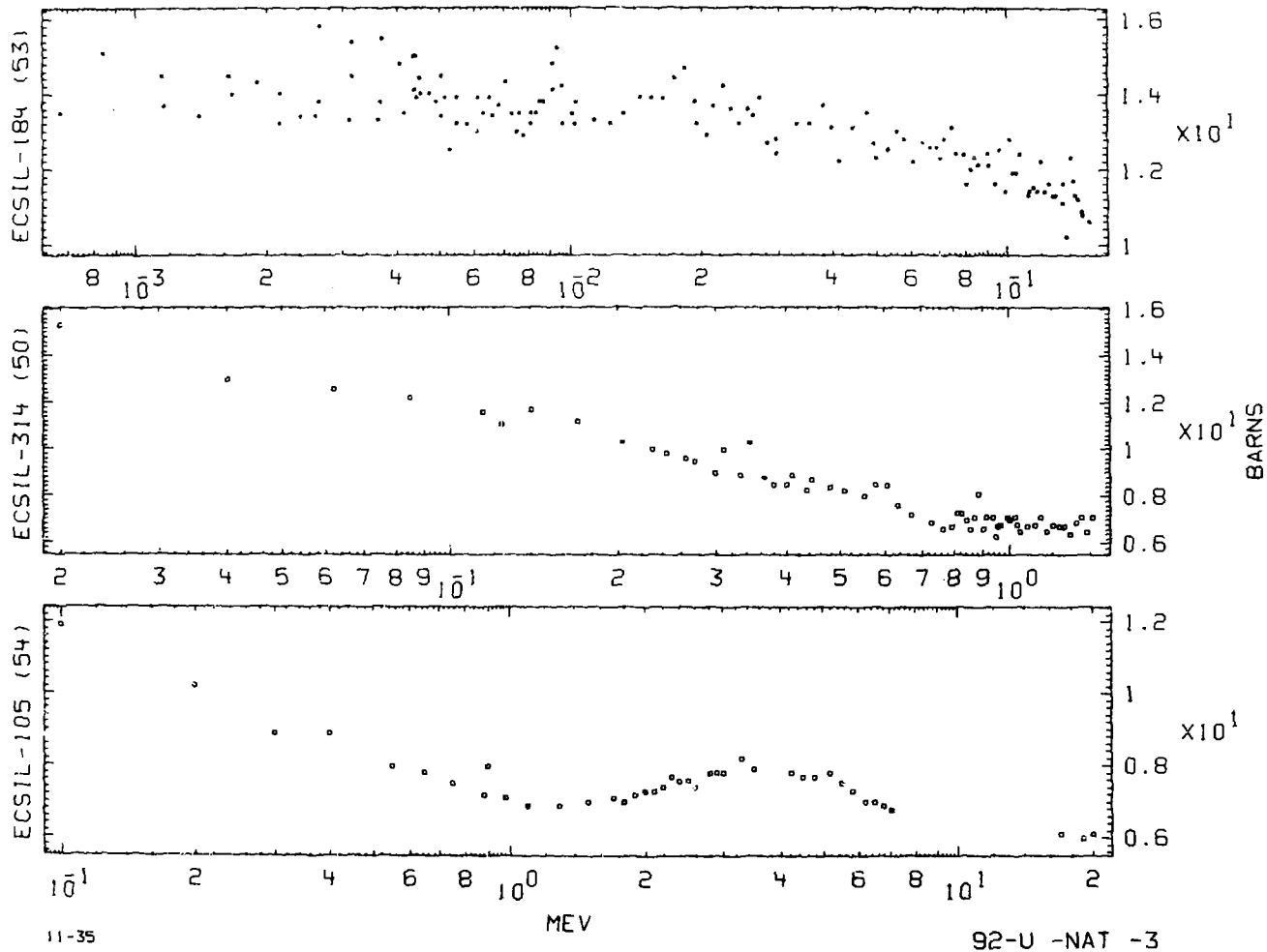
92-U -NAT



03/01/74

TOTAL
CROSS SECTION

92-U -NAT



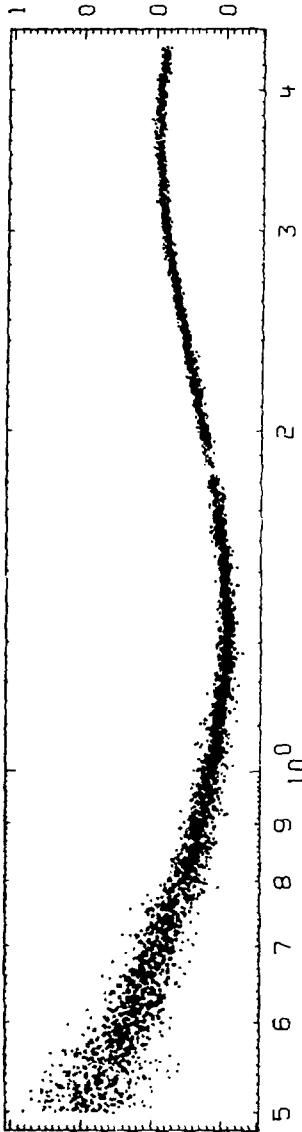
03/01/74

TOTAL CROSS SECTION

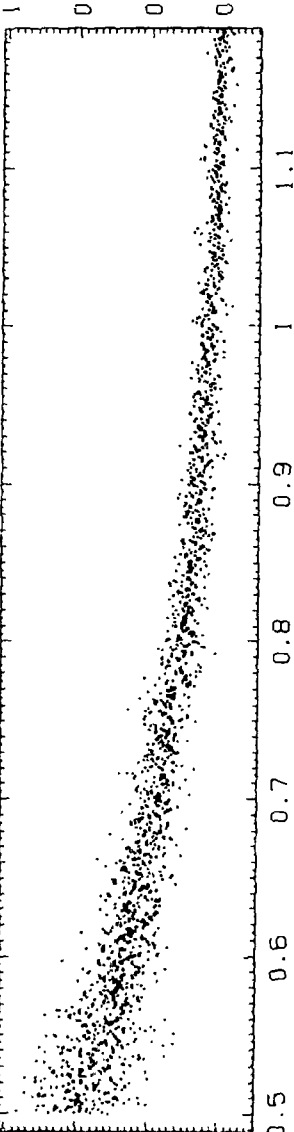
92-U -NAT

(EXPANDED BELOW)

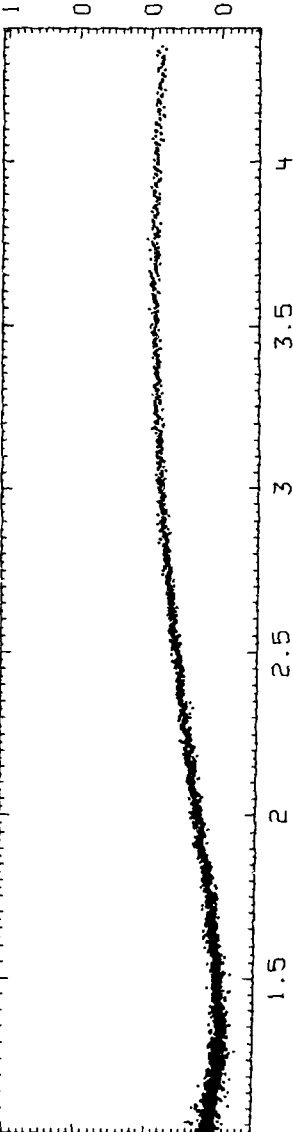
ECSIL-3330 (70)



ECSIL-3330 (70)



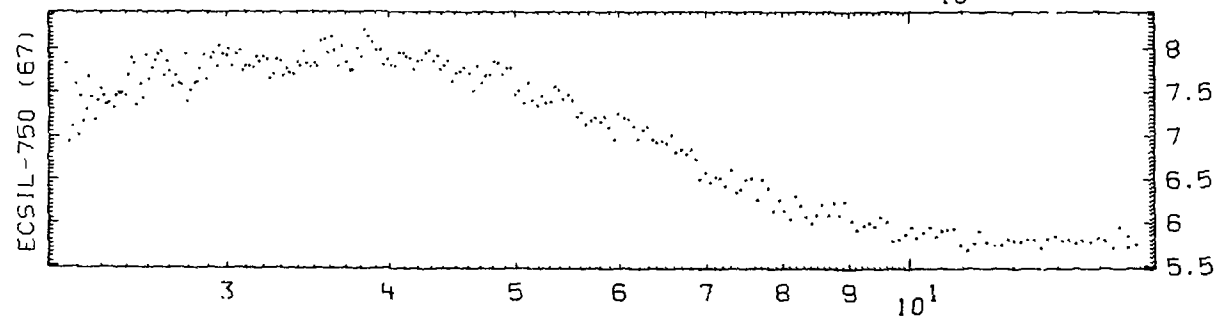
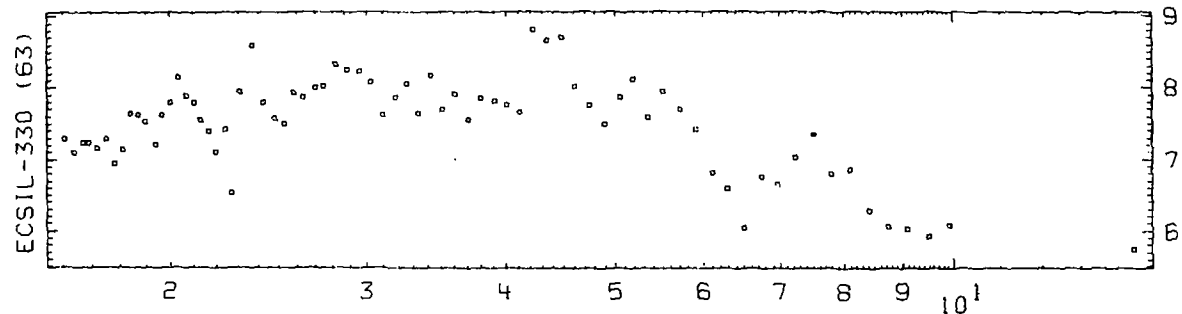
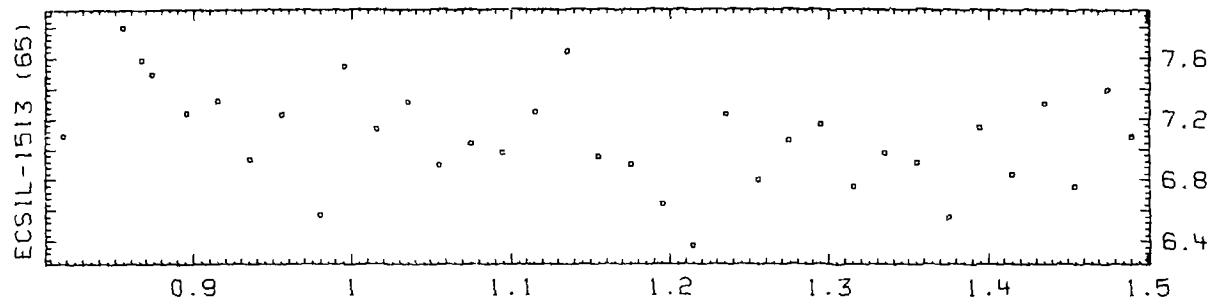
ECSIL-3330 (70)



03/01/74

TOTAL
CROSS SECTION

92-U -NAT



BARNs

11-37

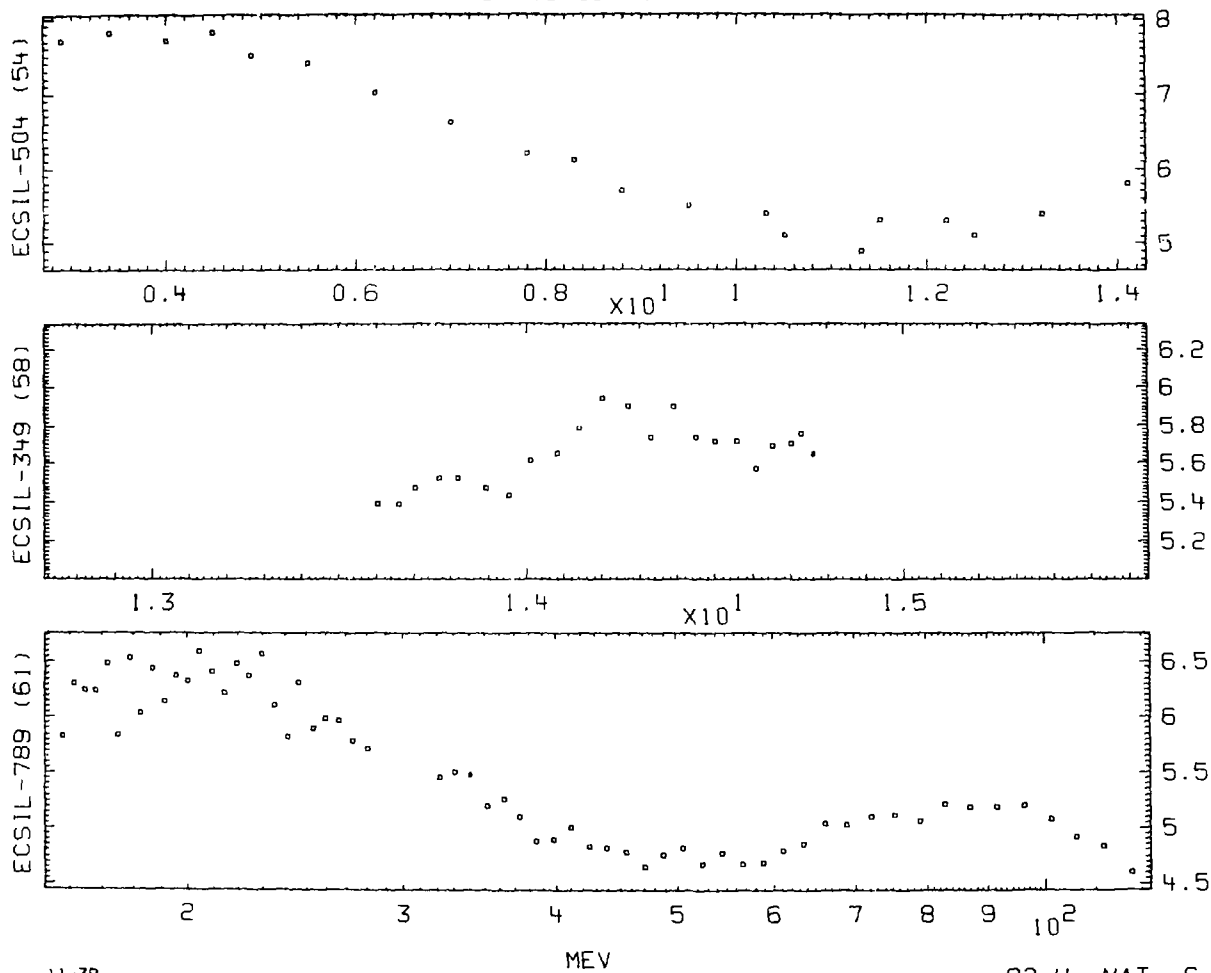
MEV

92-U -NAT -5

03/01/74

TOTAL
CROSS SECTION

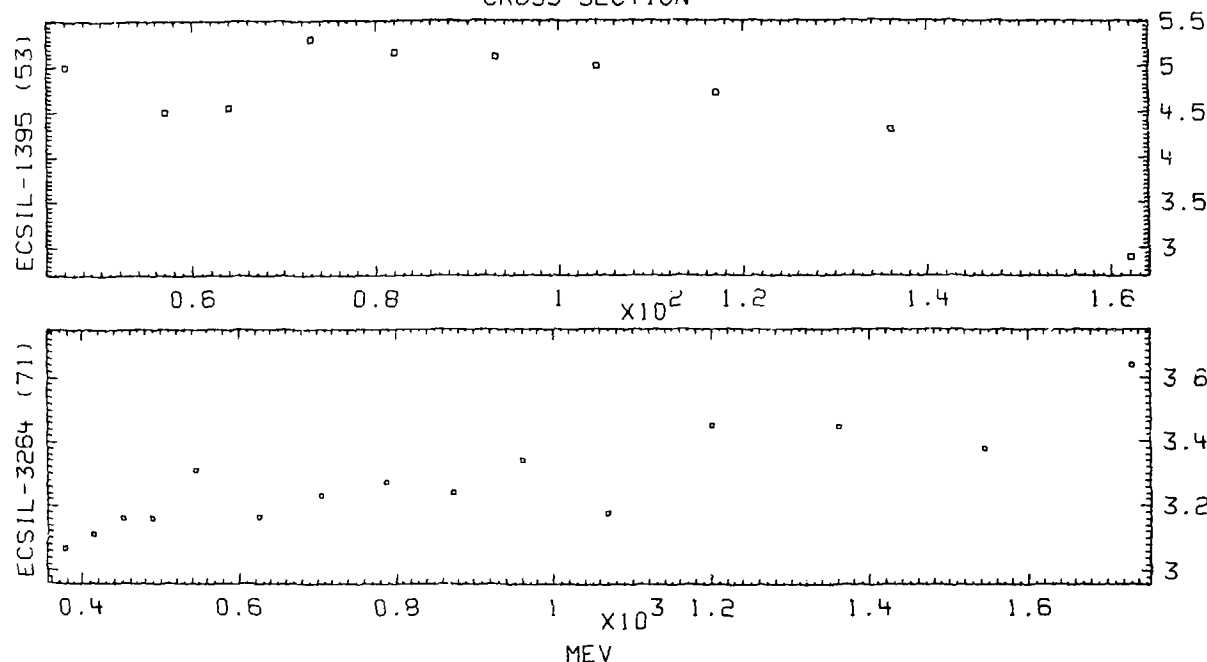
92-U -NAT



03/01/74

TOTAL
CROSS SECTION

92-U -NAT



03/01/74

TOTAL

92-U -NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
41	170	9.0000- 1	8.0000+ 0	4.0000- 1	61	233	2.8400+ 1	6.0010+ 0	1.5000- 1
52	81	1.4000+ 1	5.8710+ 0	1.1000- 1	49	286	9.0000+ 1	5.0310+ 0	1.0000- 1
50	368	1.4800+ 1	5.6410+ 0	1.0000- 1	55	2056	1.4000+ 3	2.0000+ 2	3.6400+ 0
53	274	1.7970+ 1	4.5000- 1	6.1410+ 0	69	3160	5.7000+ 3	6.0000+ 2	3.6200+ 0
53	274	1.9000+ 1	7.3000- 1	5.9410+ 0	68	2350	2.7000+ 4	2.7700+ 0	1.5000- 1
53	274	2.0070+ 1	2.6000- 1	6.2910+ 0					

03/01/74

ELASTIC
CROSS SECTION

92-U -NAT

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
54 1279	2.5300- 8		8.6000+ 0	3.0000- 1
64 1255	3.0000- 1		8.7000+ 0	3.7000- 1
64 1255	5.0000- 1		7.2500+ 0	3.6000- 1
57 444	5.0000- 1		7.3000+ 0	
64 870	8.0000- 1	5.0000- 2	6.0000+ 0	2.2000- 1
57 444	1.0000+ 0		5.4000+ 0	
58 403	1.4500+ 1		2.7300+ 0	1.4000- 1

03/01/74

NEUTRONS/NONELASTIC EVENT

92-U -NAT

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
58 877	1.4000+ 1		2.8000+ 0	3.0000- 1

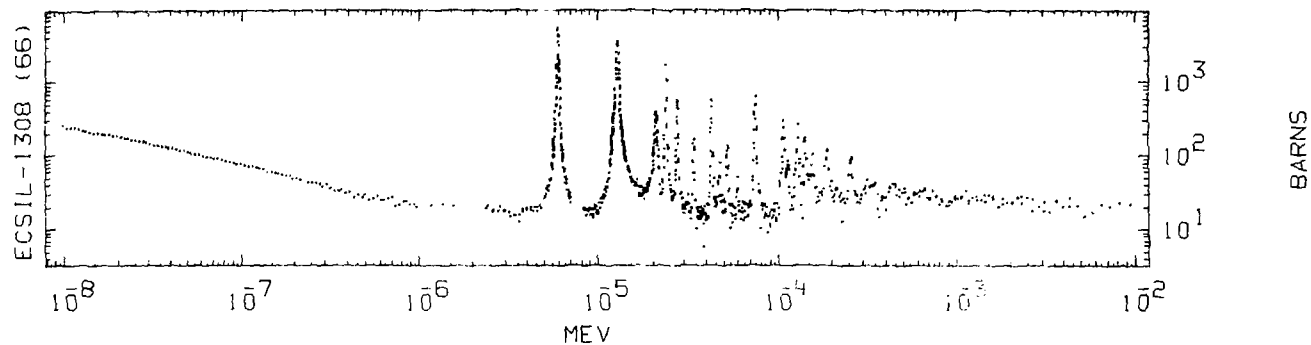
11-40

92-U -NAT -8

03/01/74

TOTAL
CROSS SECTION

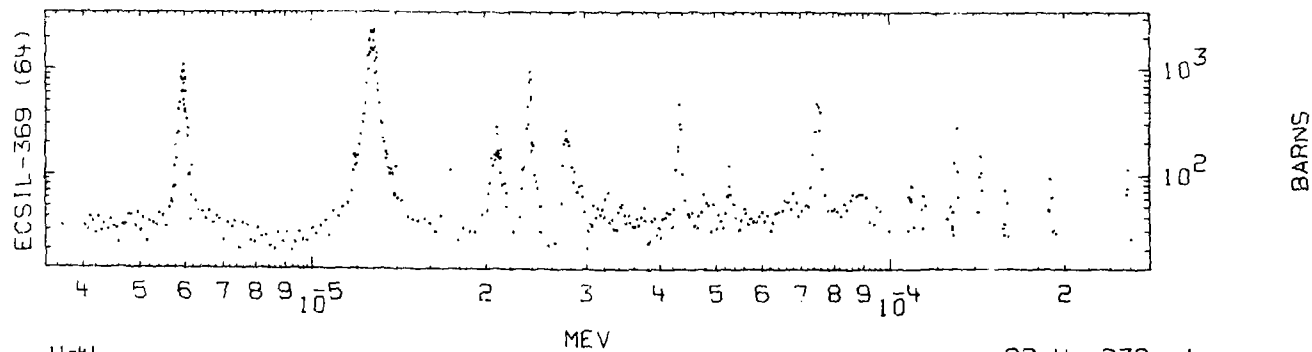
92-U -232



03/01/74

FISSION
CROSS SECTION

92-U -232



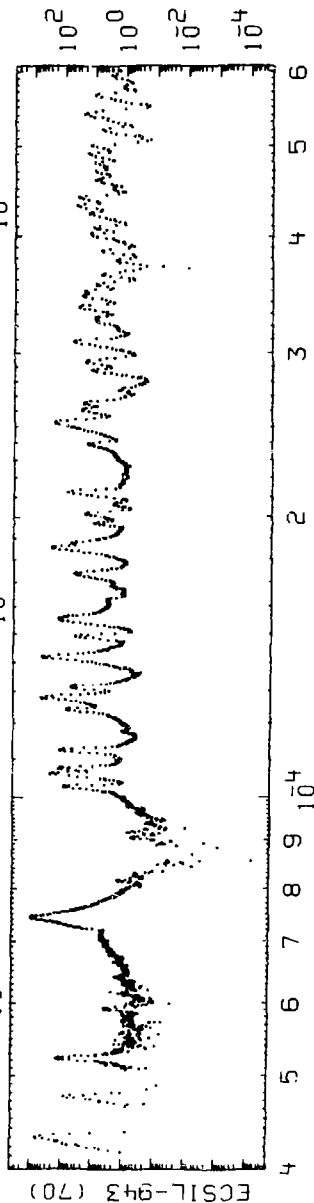
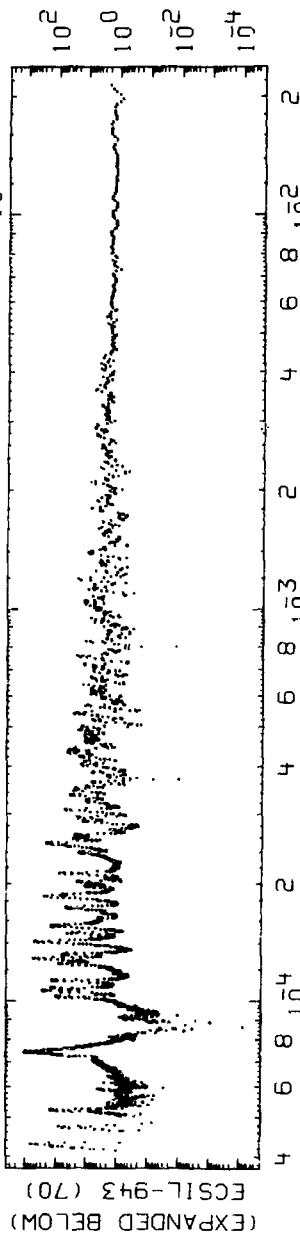
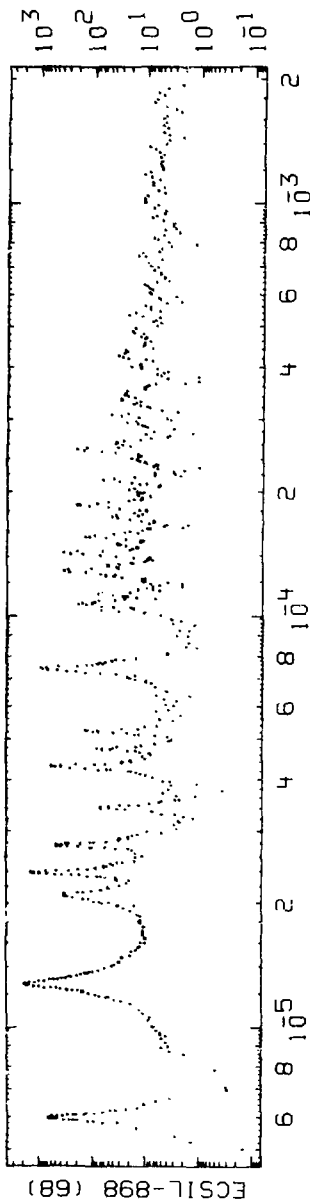
11-41

92-U -232 -1

03/01/74

FISSION
CROSS SECTION

92-U -232



MEV

11-42

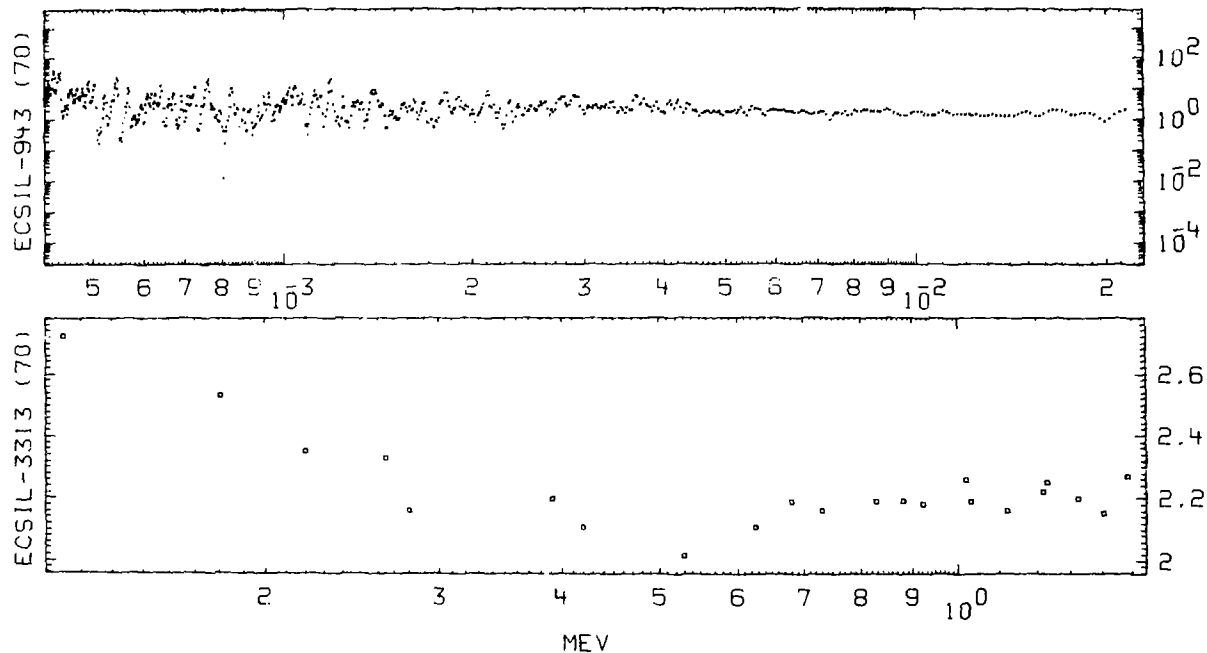
92-U -232 -2

BARNs

03/01/74

FISSION
CROSS SECTION

92-U -232



03/01/74

PROMPT NEUTRONS/FISSION

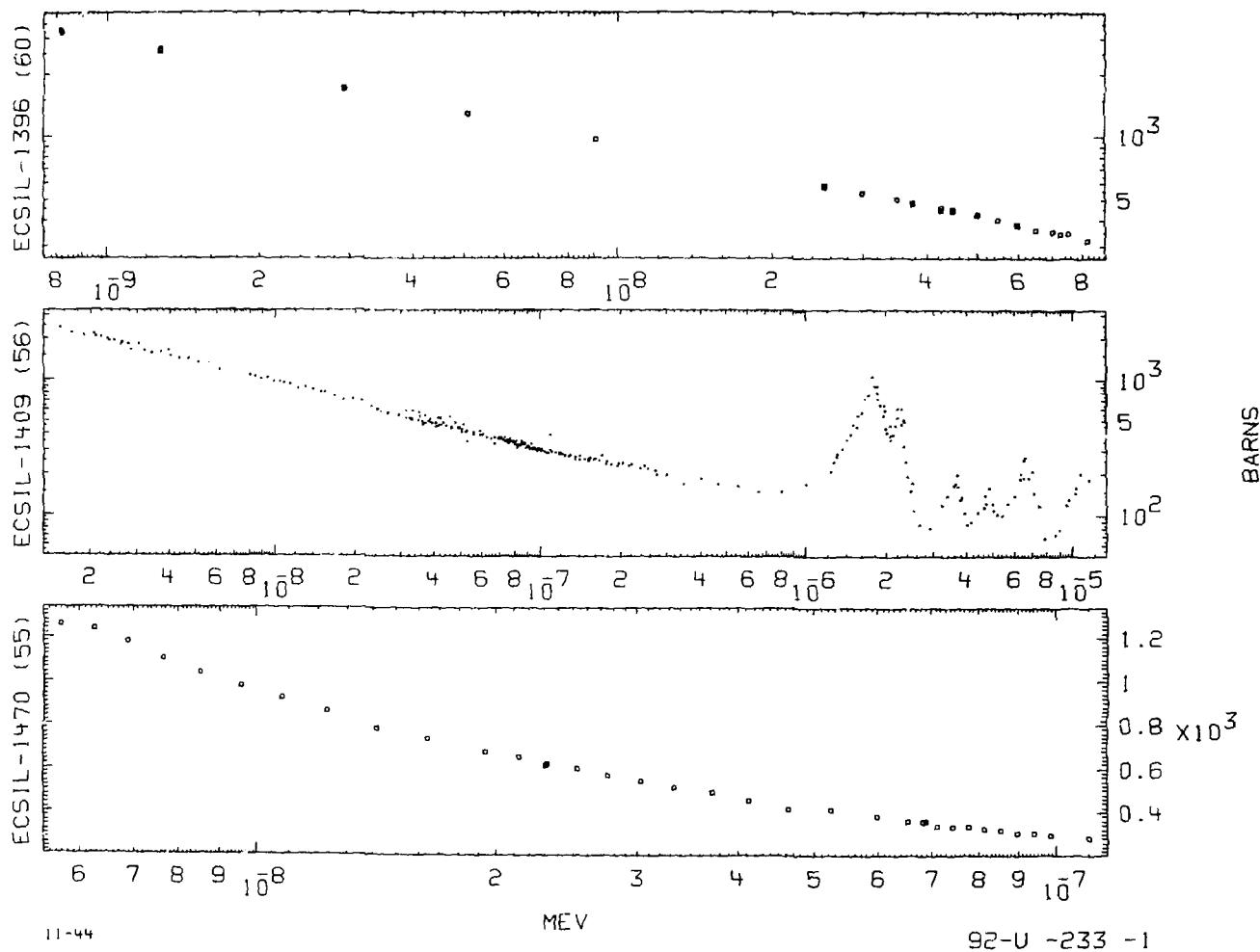
92-U -232

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
69 1912	2.5300- 8		3.1300+ 0	6.0000- 2
61 1088	2.5300- 8		3.0700+ 0	6.0000- 2

03/01/74

TOTAL
CROSS SECTION

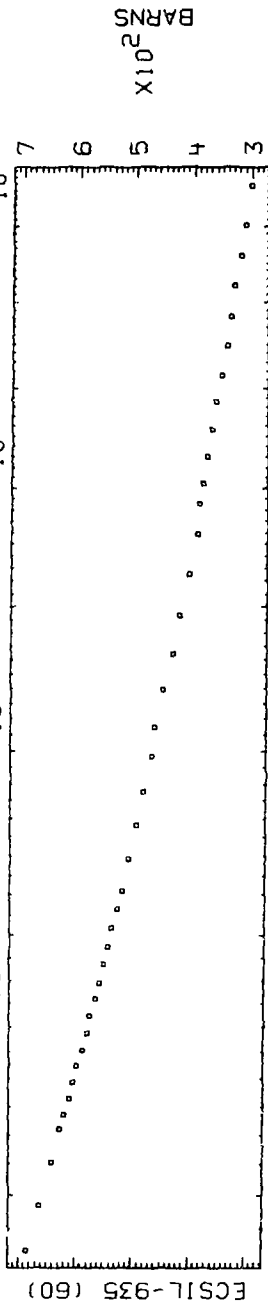
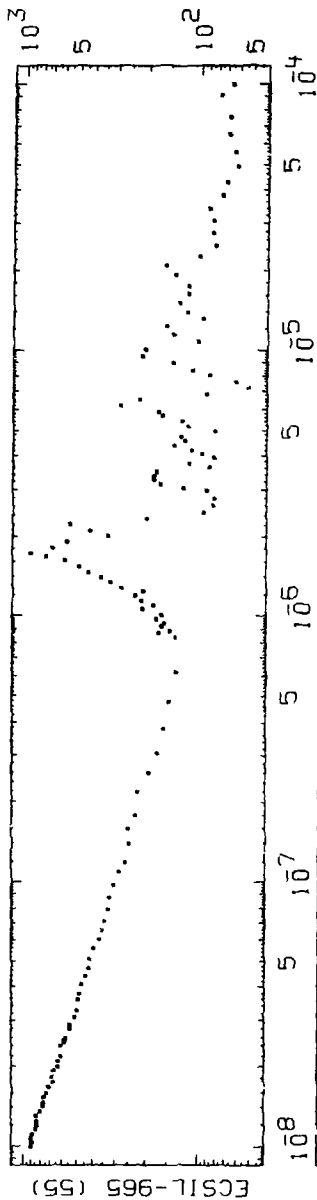
92-U -233



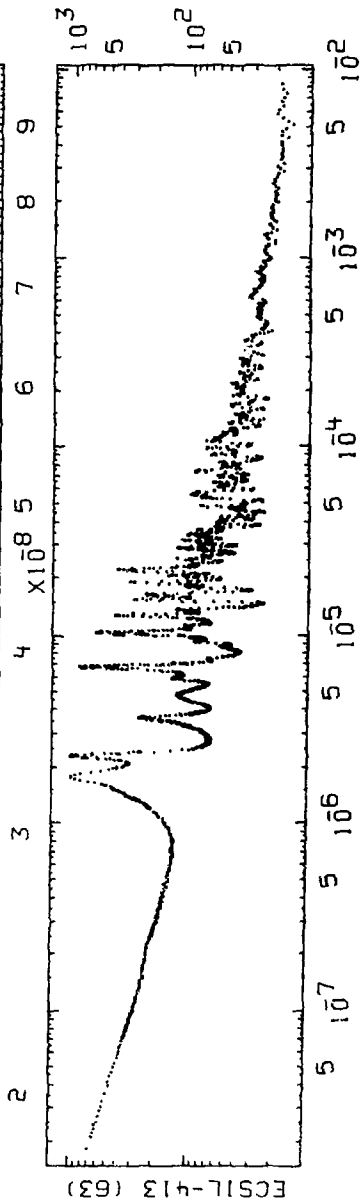
03/01/74

92-U -233

TOTAL
CROSS SECTION



BARNs
 $\times 10^2$



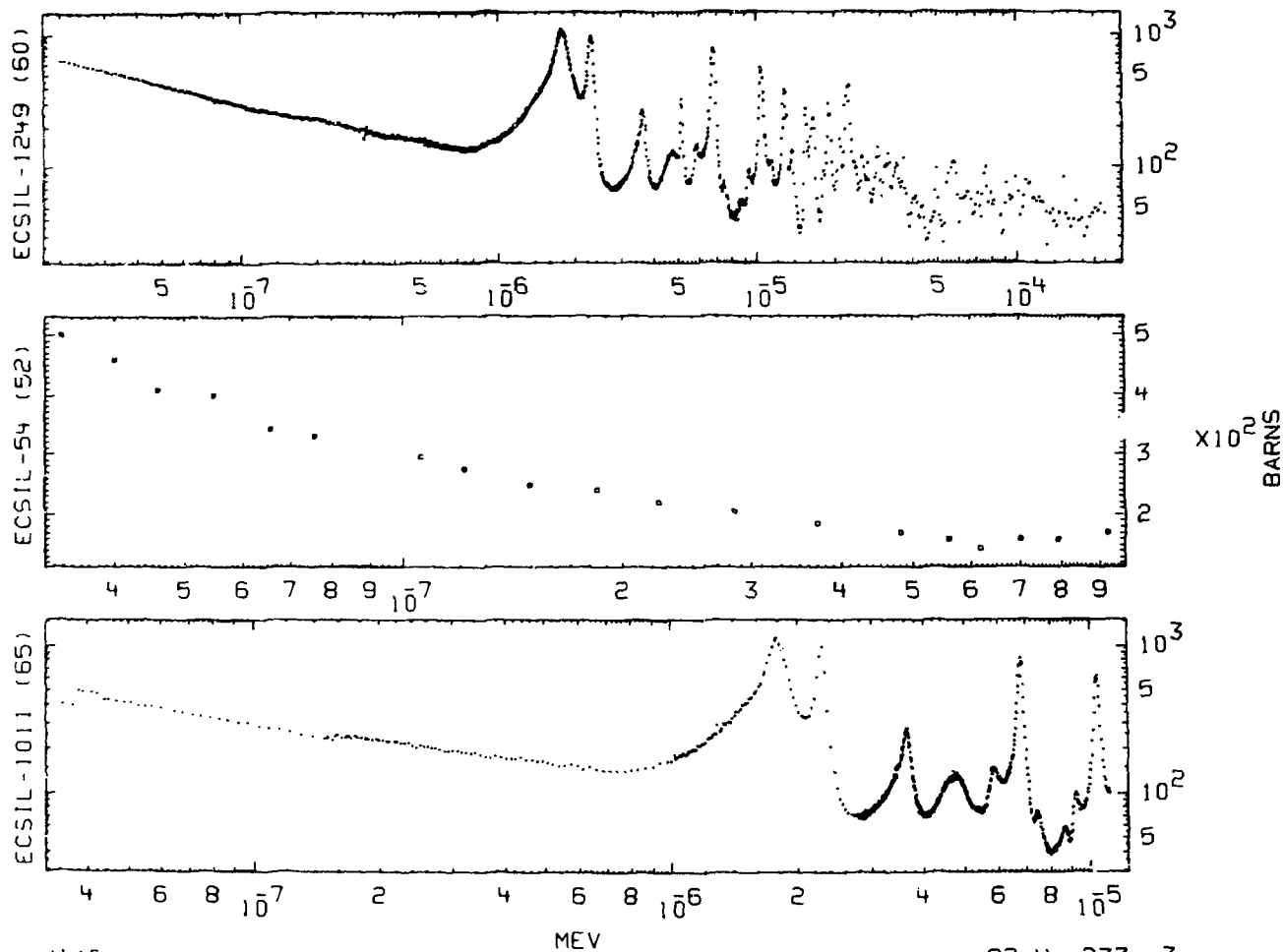
11-45

92-U -233 -2

03/01/74

TOTAL
CROSS SECTION

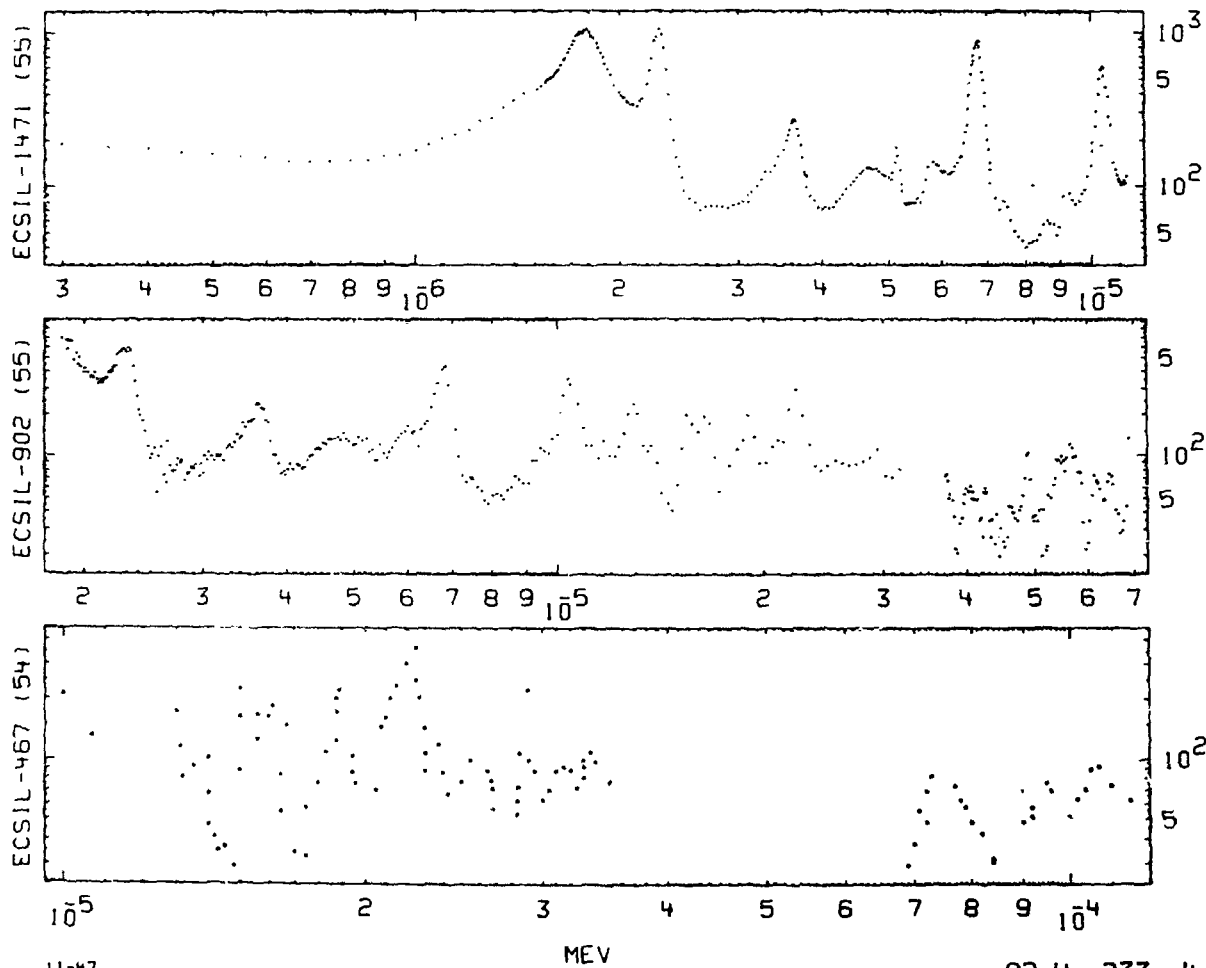
92-U -233



03/01/74

TOTAL
CROSS SECTION

92-U -233



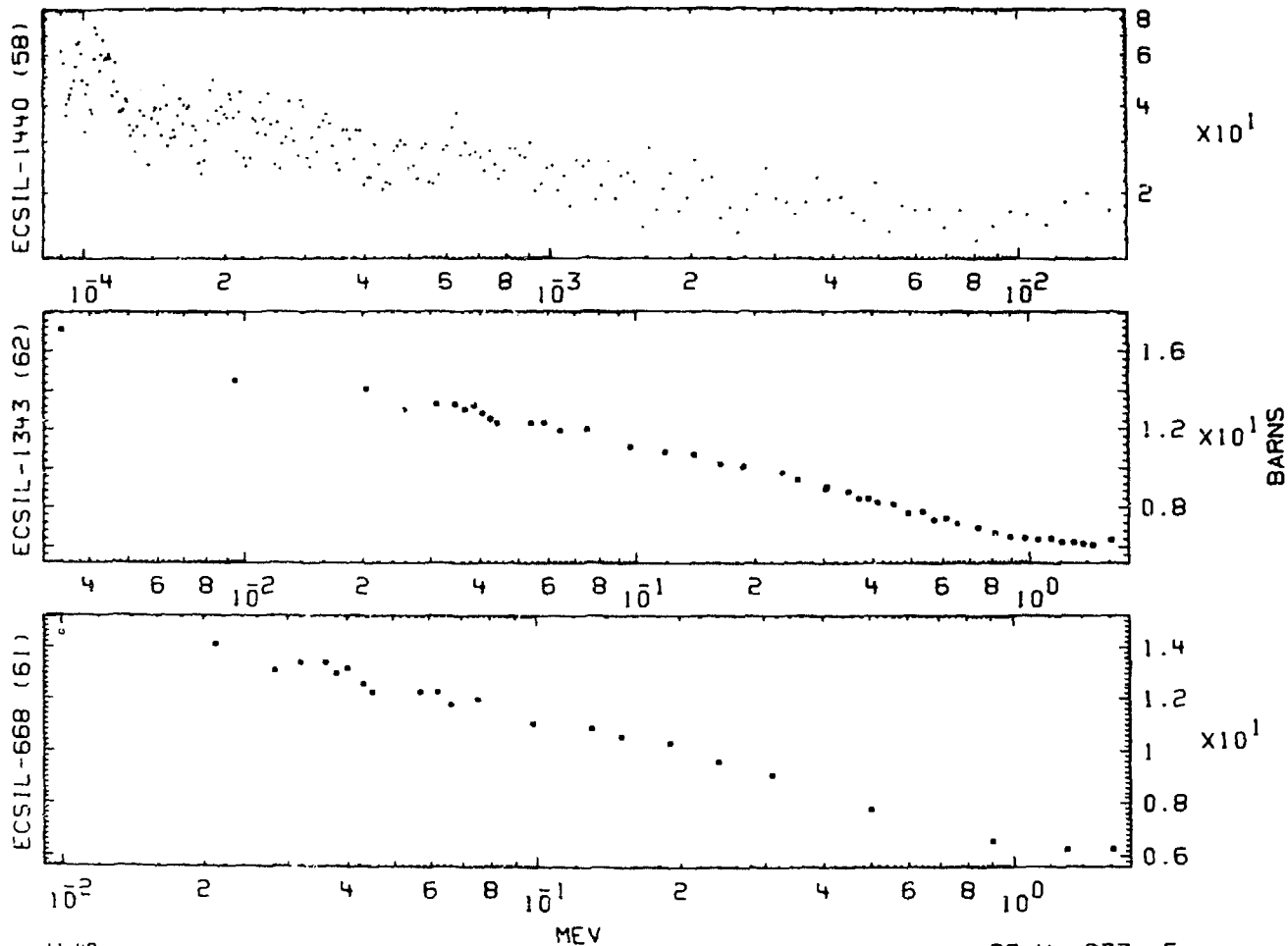
11-47

92-U -233 -4

03/01/74

TOTAL
CROSS SECTION

92-U -233



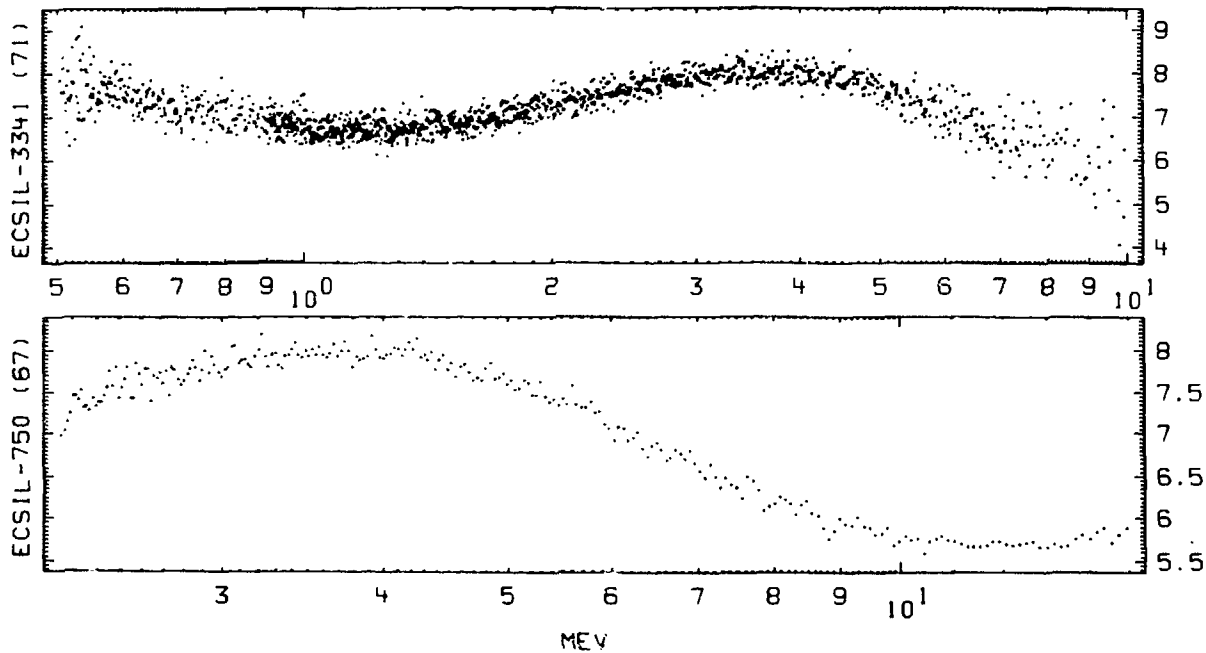
11-48

92-U -233 -5

03/01/74

TOTAL
CROSS SECTION

92-U -233

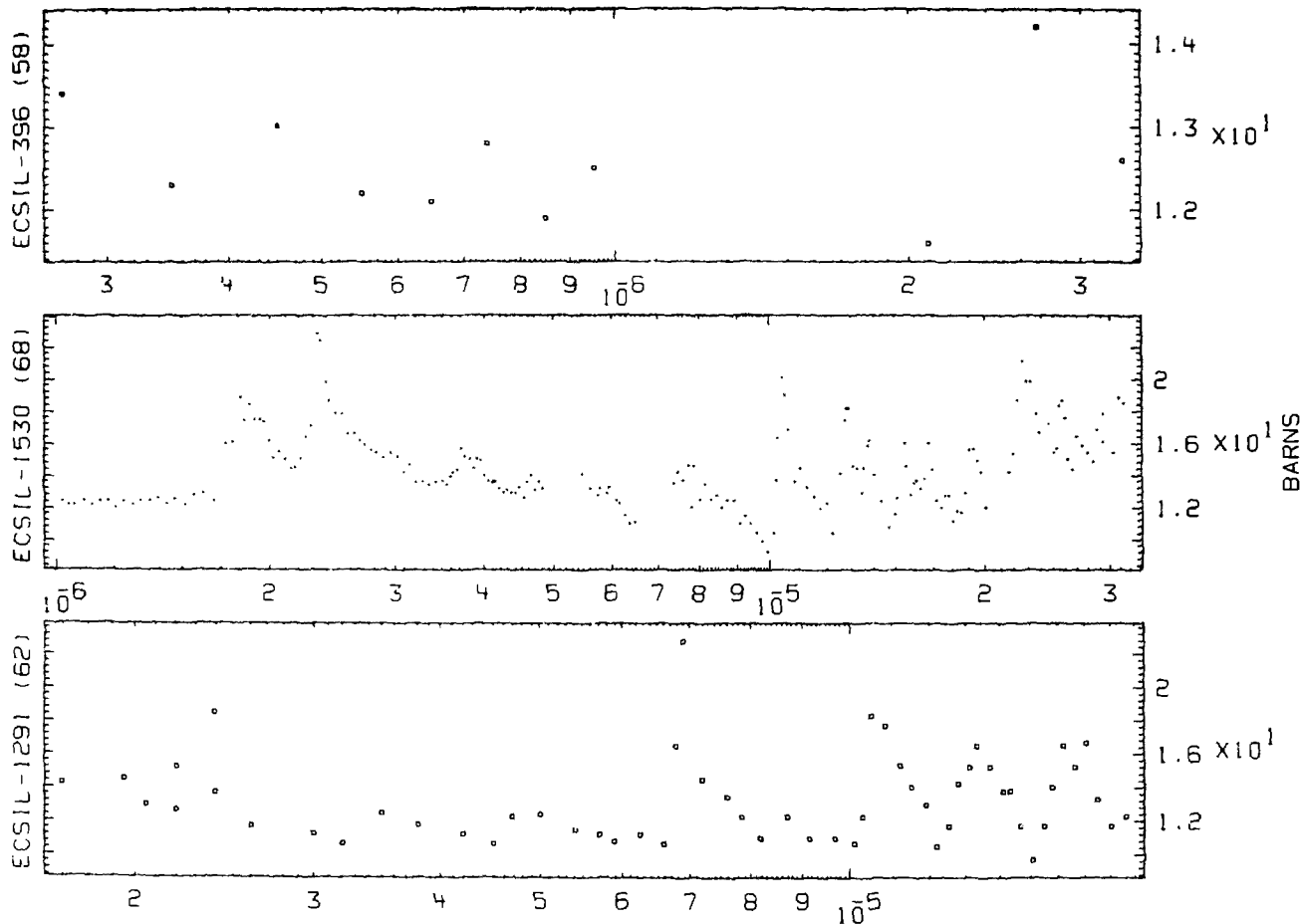


BARNs

03/01/74

ELASTIC
CROSS SECTION

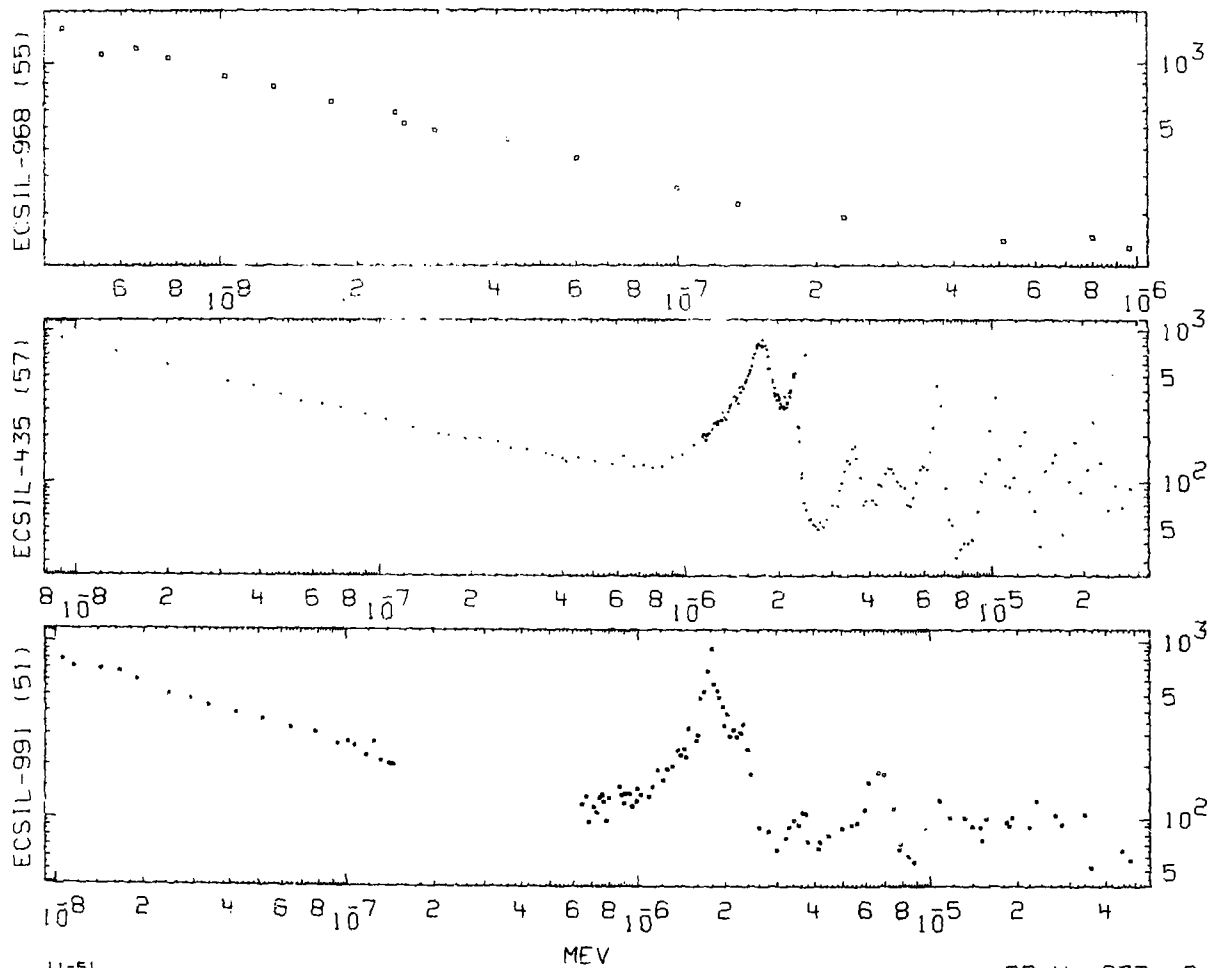
92-U -233



03/01/74

FISSION
CROSS SECTION

92-U -233



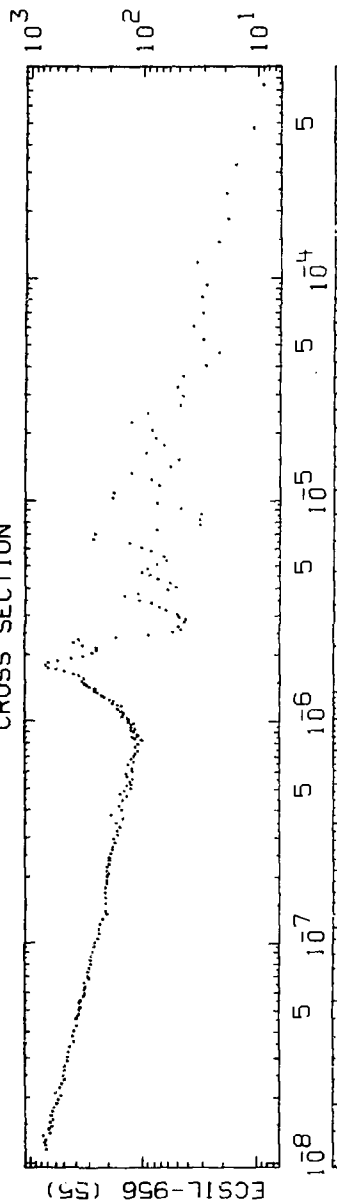
BARNs

11-51

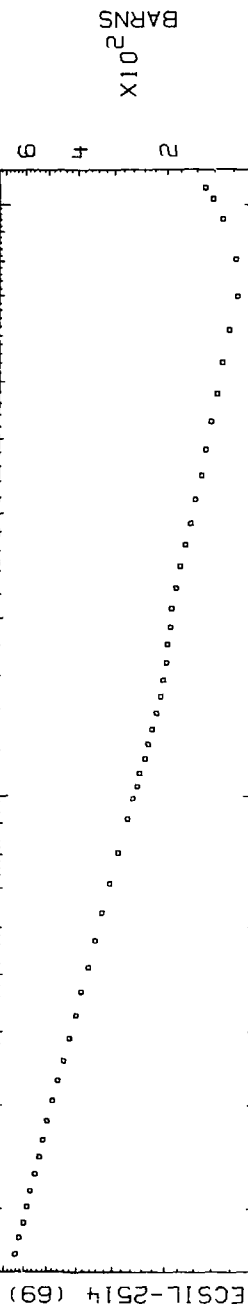
92-U -233 -8

03/01/74

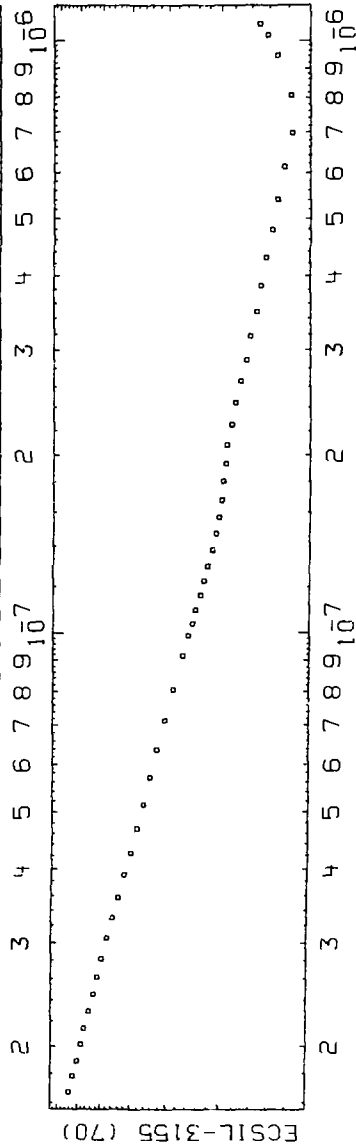
92-U -233

FISSION
CROSS SECTION

ECSIL-956 (55)



ECSIL-2514 (69)



ECSIL-3155 (70)

MEV

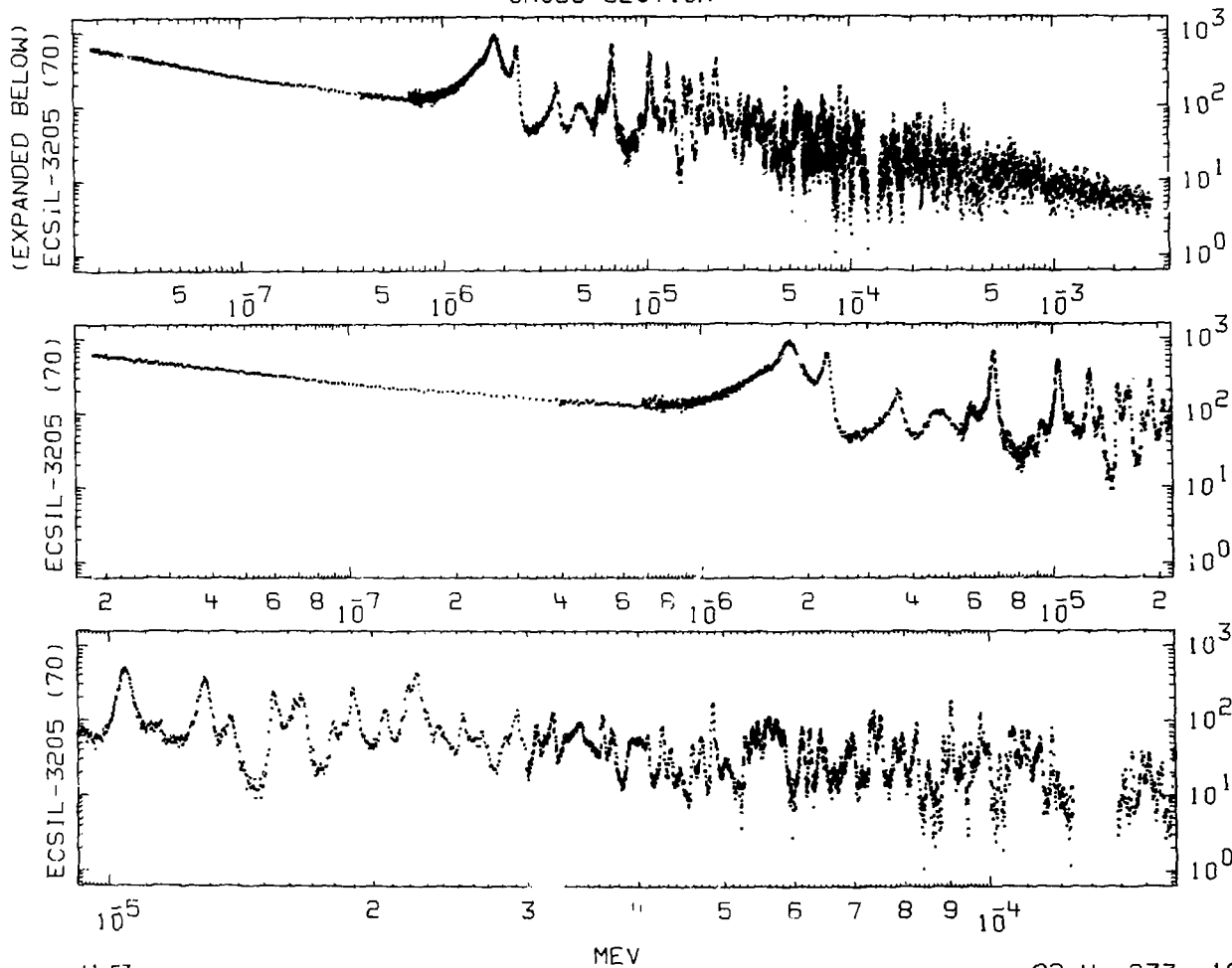
11-52

92-U -233 -9

03/01/74

FISSION
CROSS SECTION

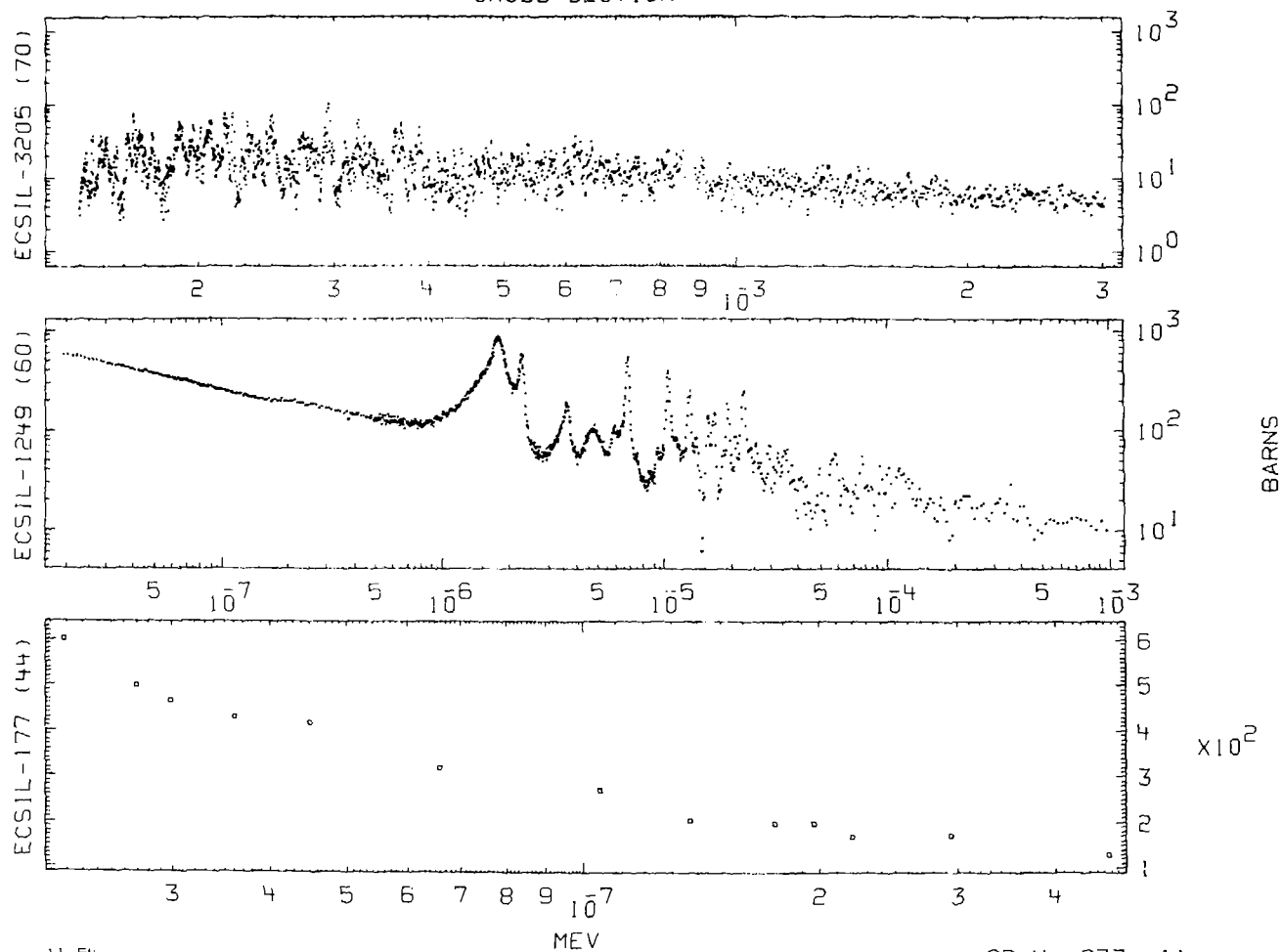
92-U -233



03/01/74

FISSION
CROSS SECTION

92-U -233



11-54

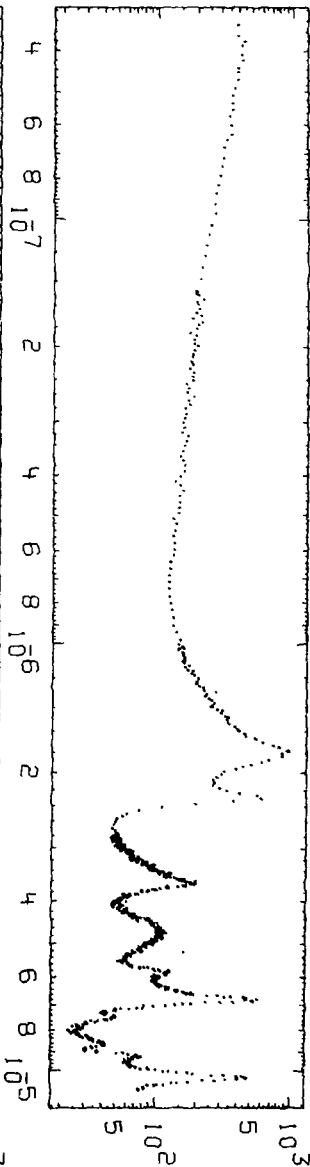
92-U -233 -11

03/01/74

FISSION
CROSS SECTION

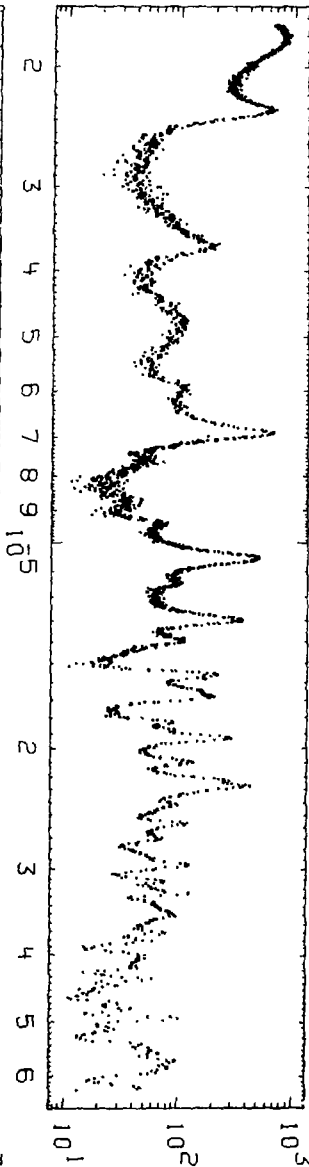
92-U -233

ECSIL-1011 (65)

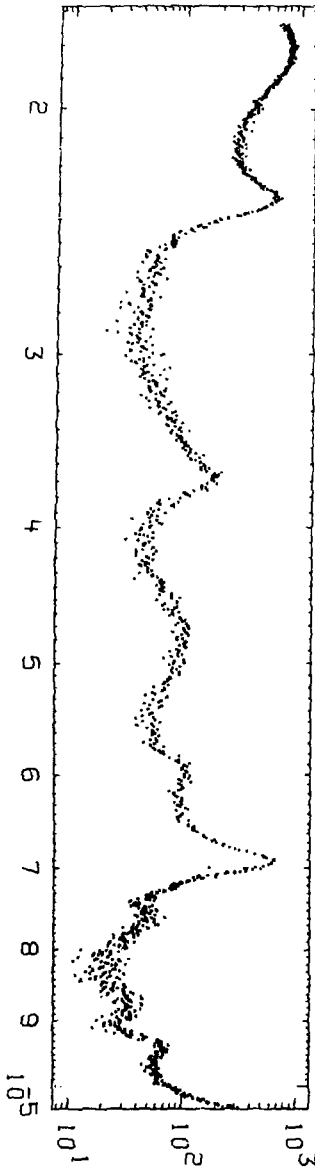


(EXPANDED BELOW)

ECSIL-1240 (64)



ECSIL-1240 (64)



11-55

MEV

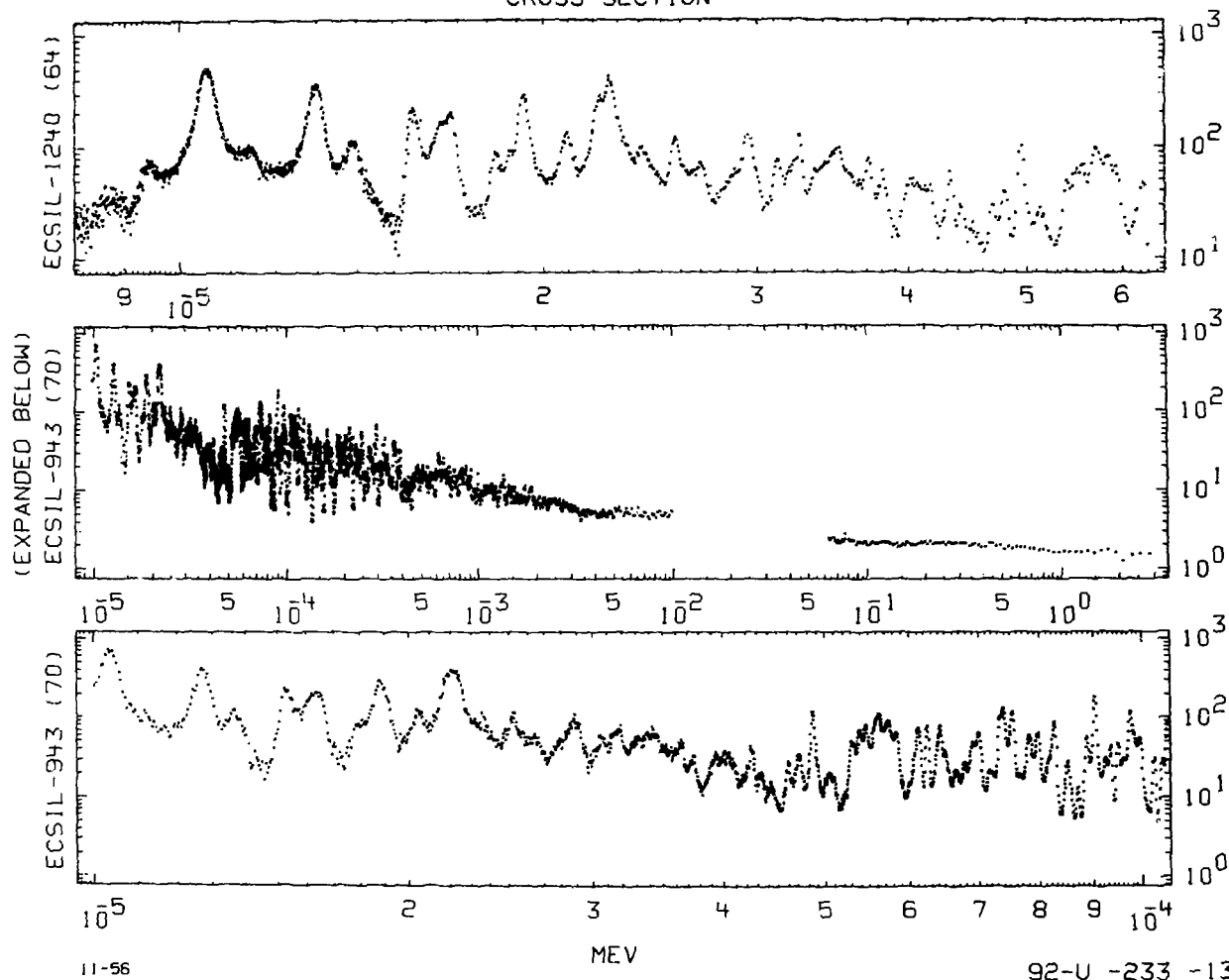
92-U -233 -12

BARNs

03/01/74

FISSION
CROSS SECTION

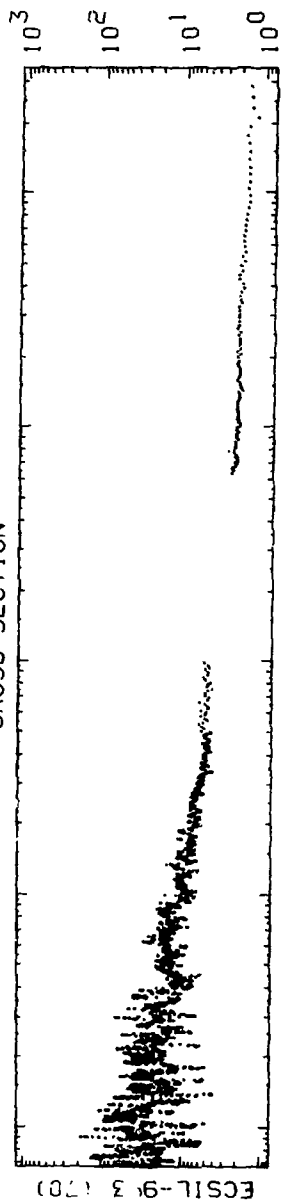
92-U -233



03/01/74

FISSION
CROSS SECTION

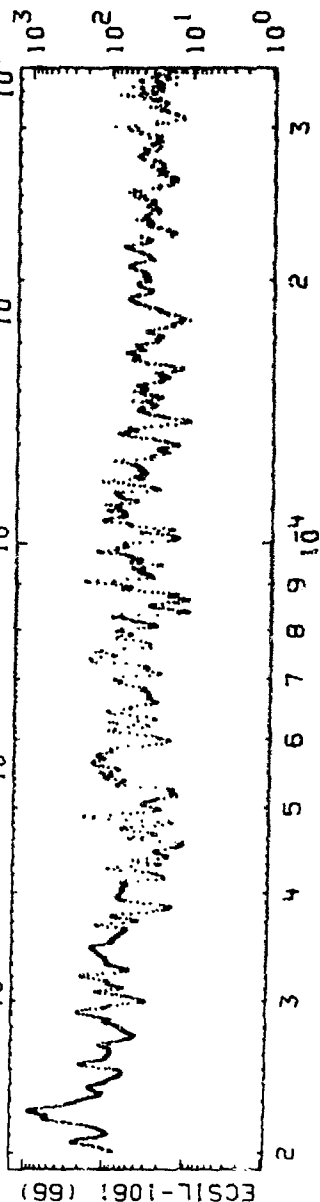
92-U -233



(EXPANDED BELOW)



ECSTL-1061 (66)



BARNs

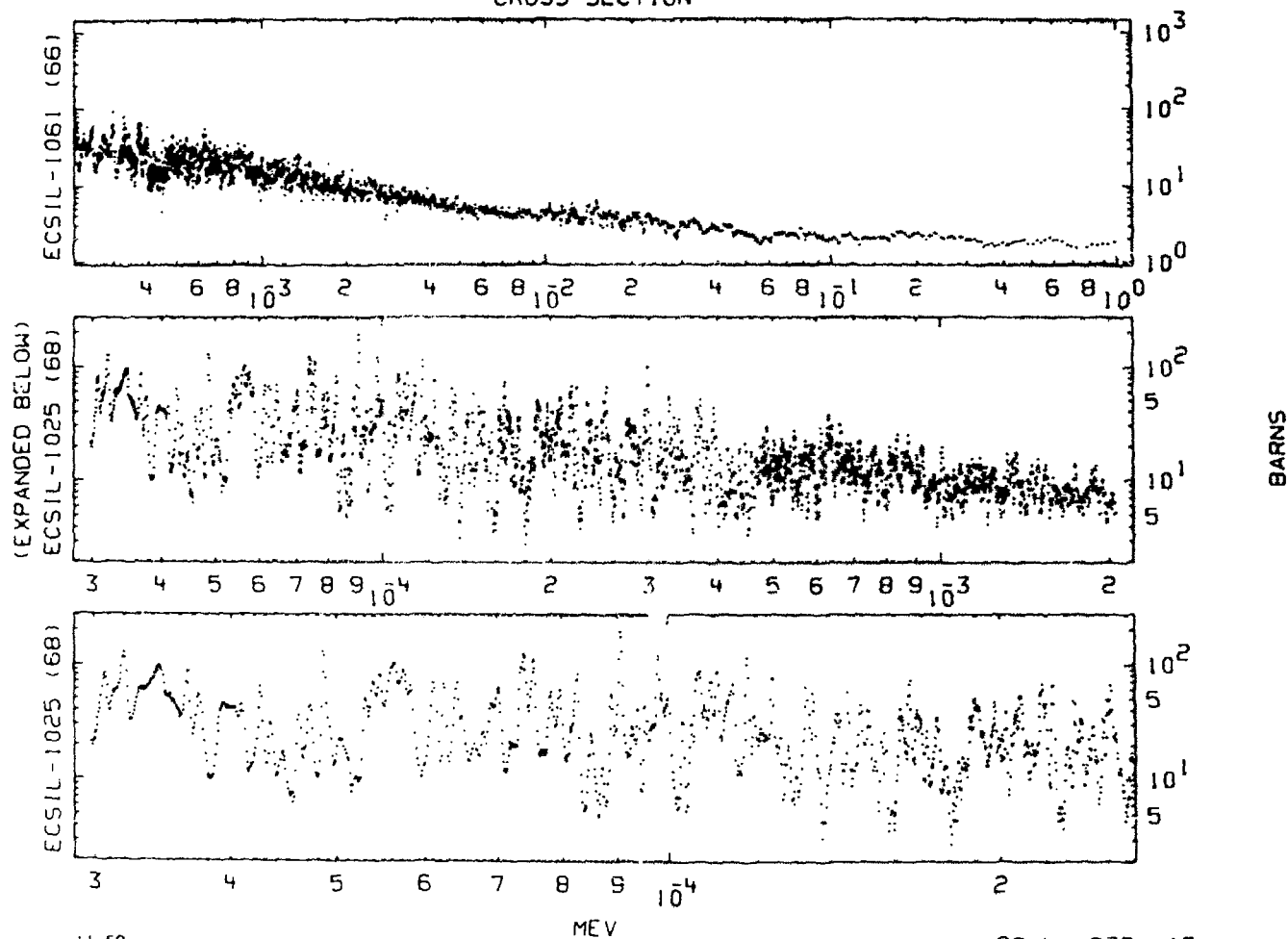
11-57

92-U -233 -14

03/01/74

FISSION
CROSS SECTION

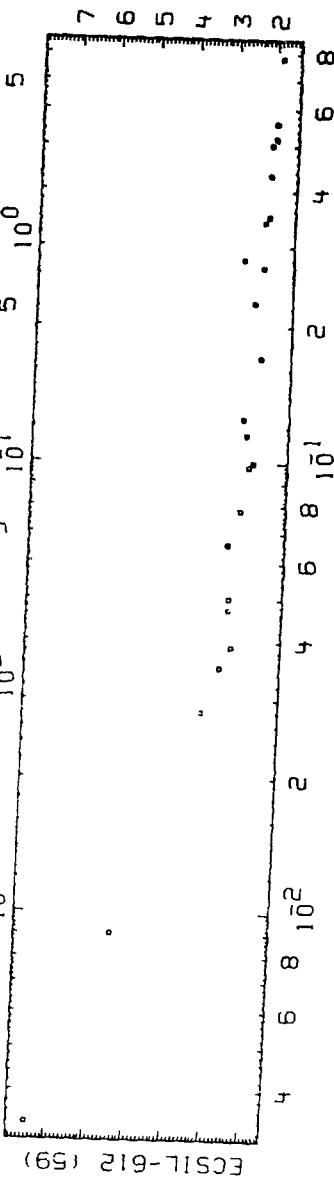
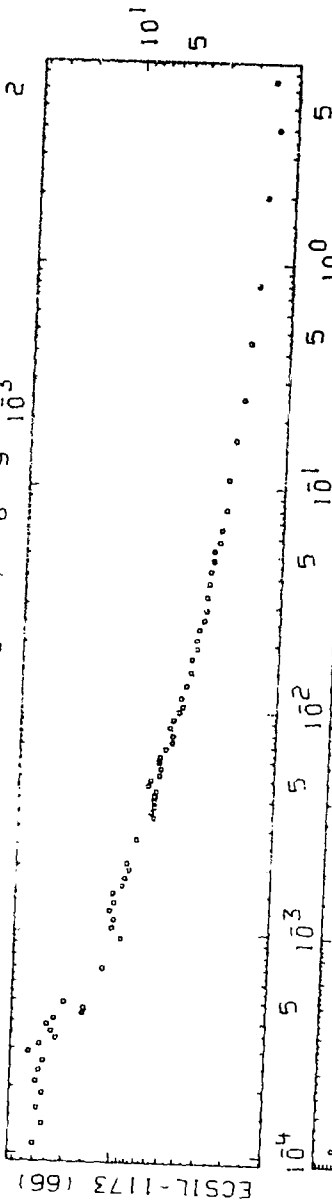
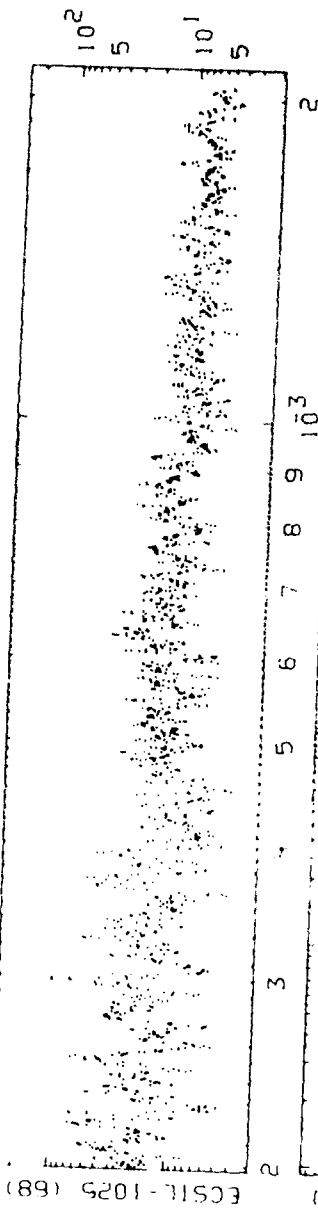
92-U -233



13-01-74

FISSION CROSS SECTION

92-U -233



BARNs

11-58

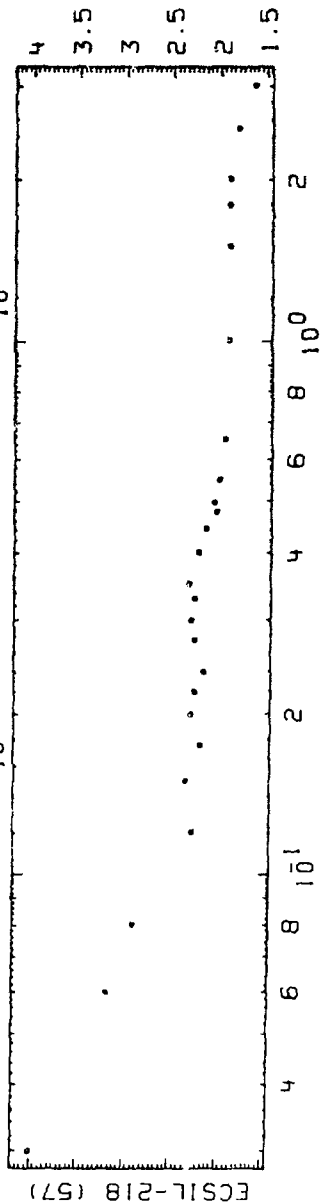
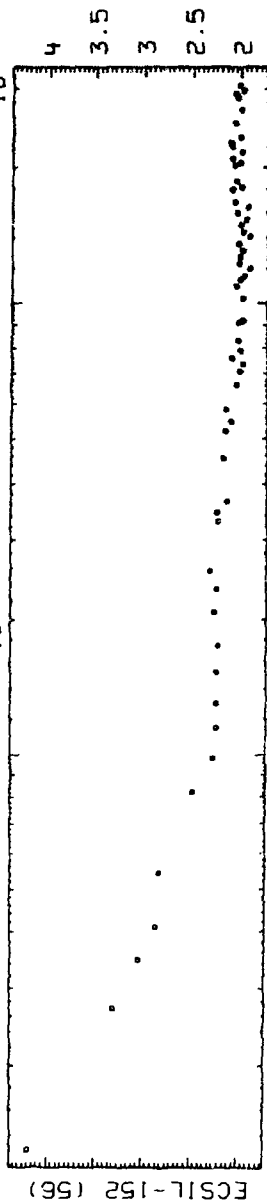
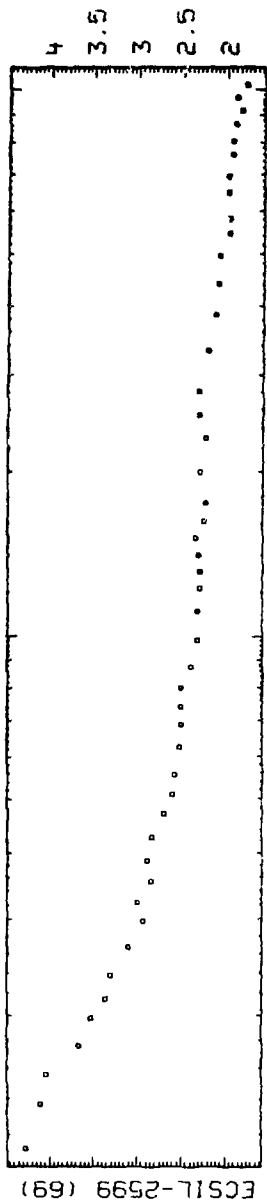
MEV

92-U -233 -16

03/01/74

FISSION CROSS SECTION

92-U -233



BARNs

MEV

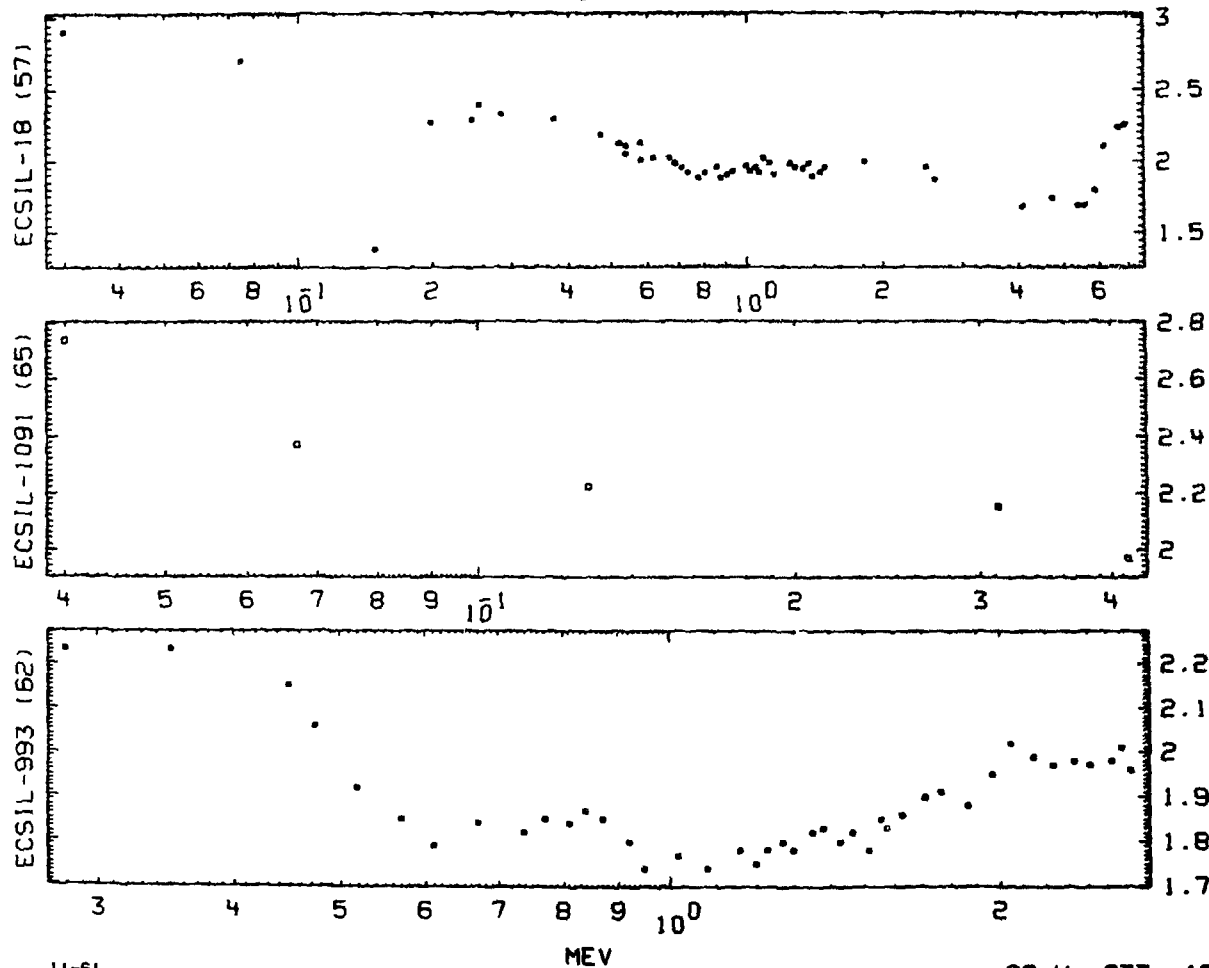
11-60

92-U -233 -17

03/01/74

FISSION
CROSS SECTION

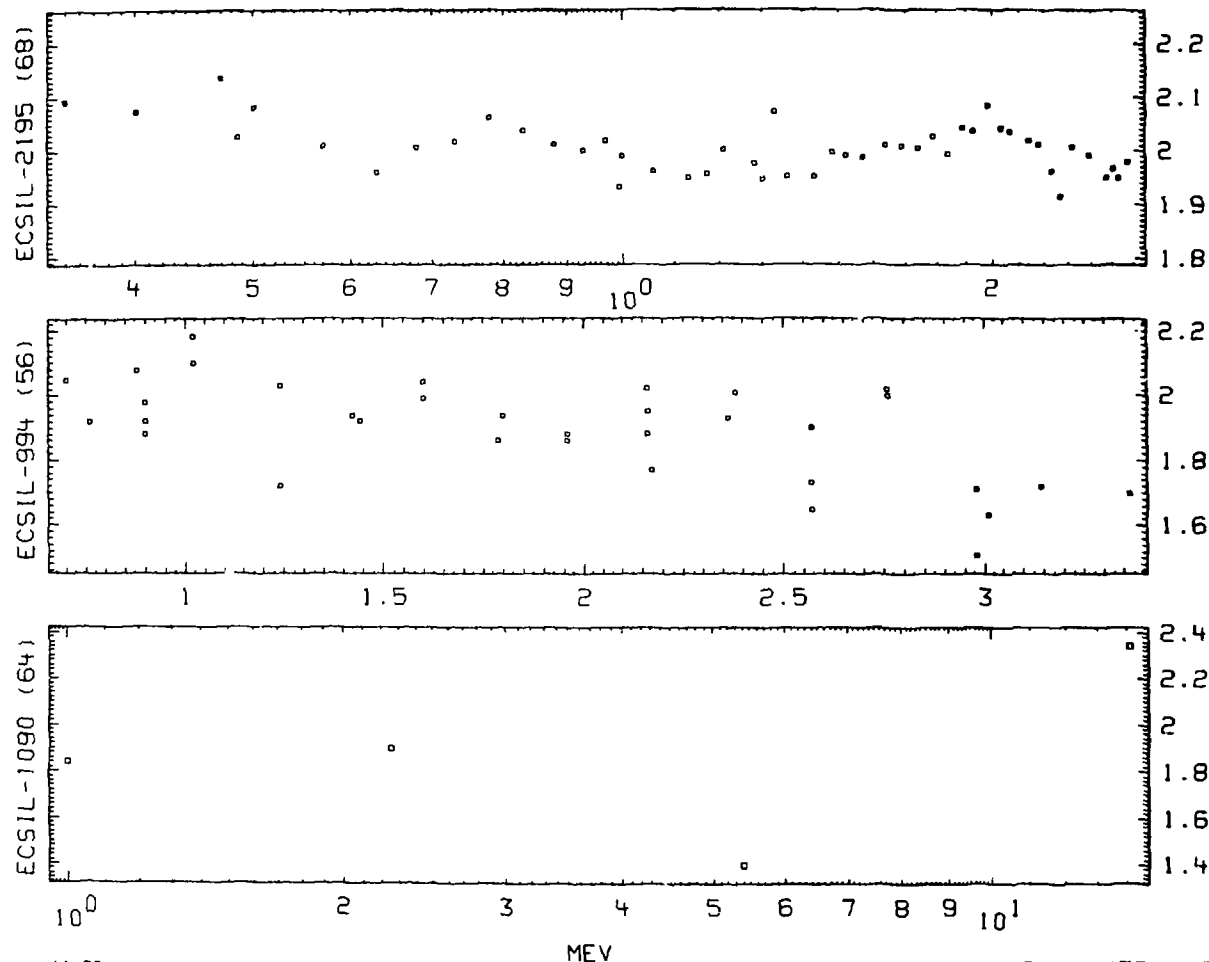
92-U -233



03/01/74

FISSION
CROSS SECTION

92-U -233



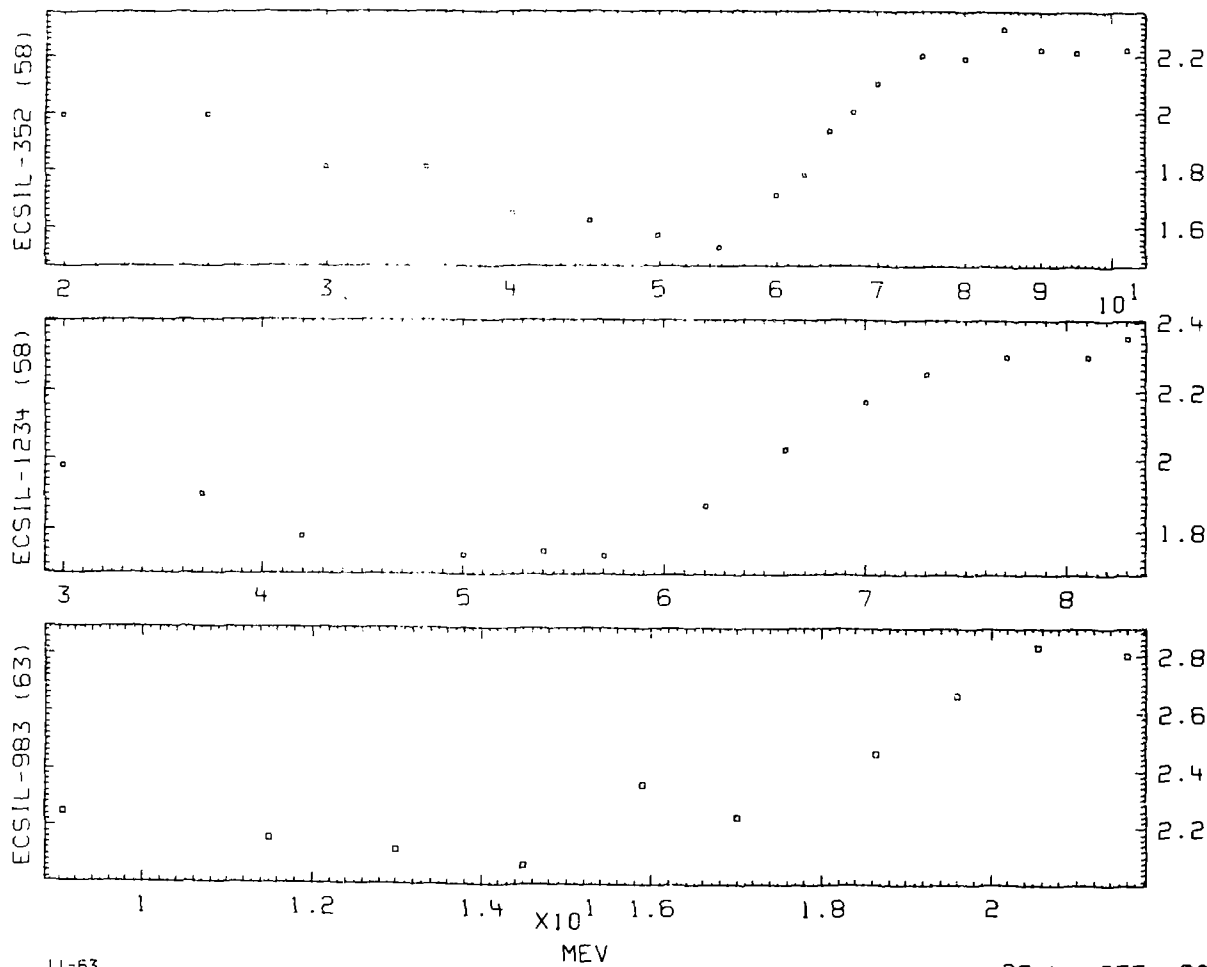
11-62

92-U -233 -19

03/01/74

FISSION
CROSS SECTION

92-U -233



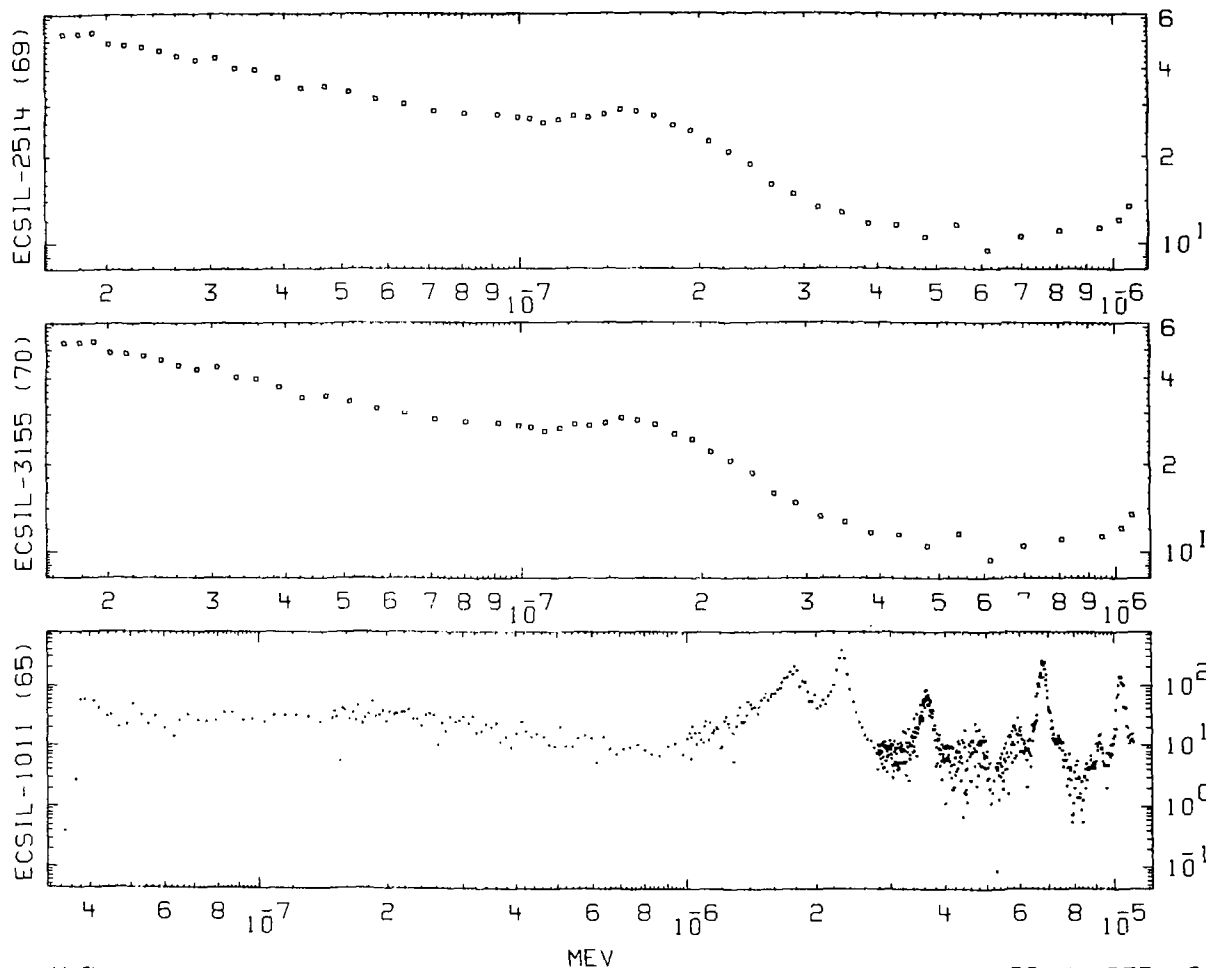
11-63

32-U -233 -20

03/01/74

N, GAMMA
CROSS SECTION

92-U -233



11-64

MEV

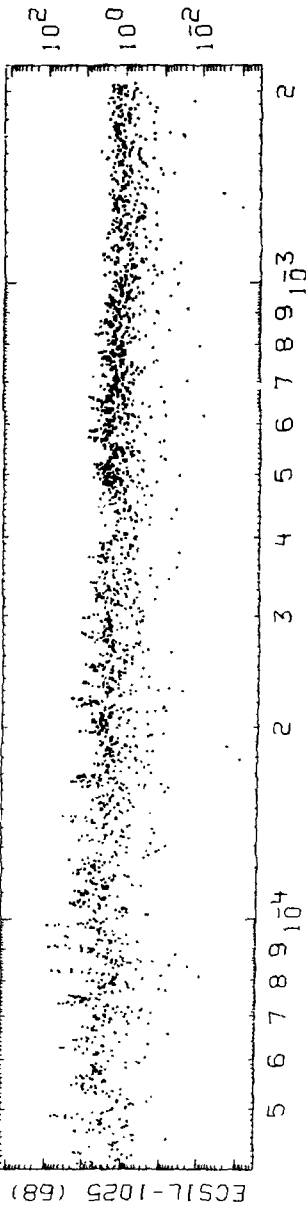
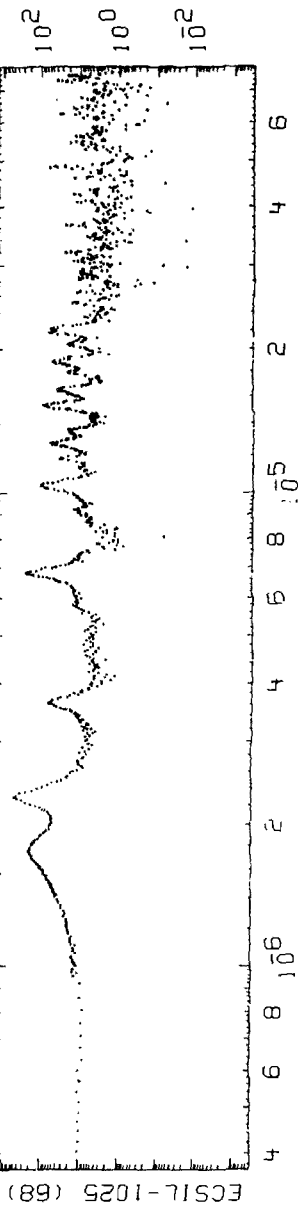
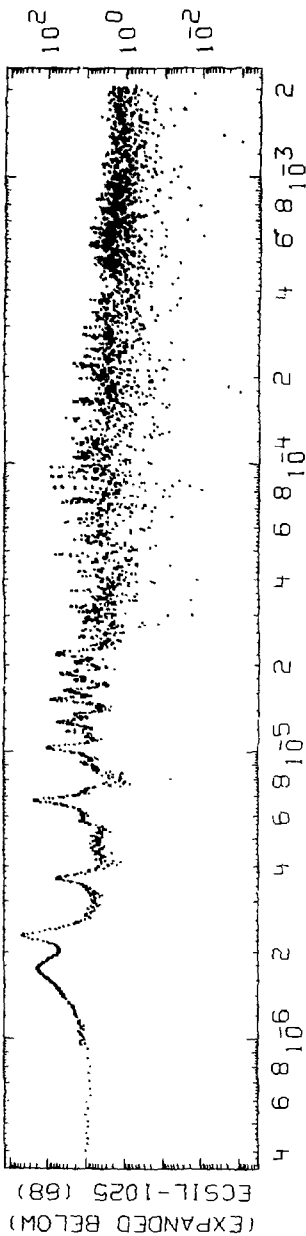
92-U -233 -21

03/01/74

N. GAMMA

92-U -233

CROSS SECTION



MEV

11-65

92-U -233 -22

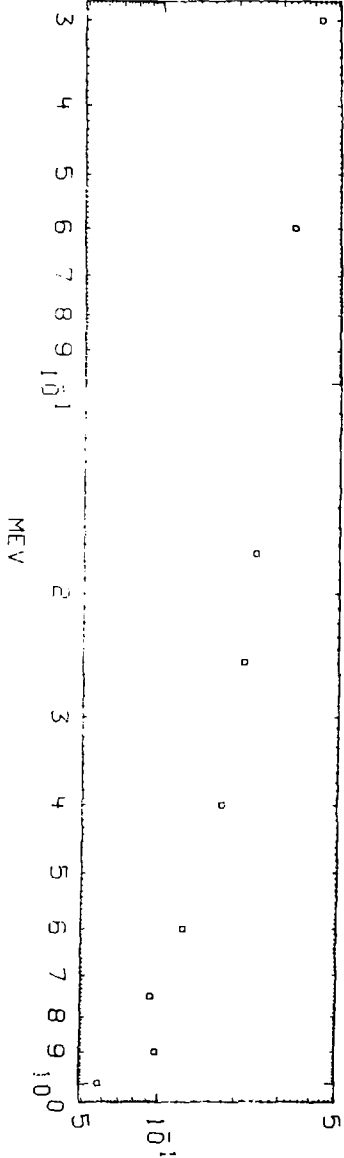
BARNS

03/01/74

N, GAMMA
CROSS SECTION

92-U -233

ECSIL-709 (62)



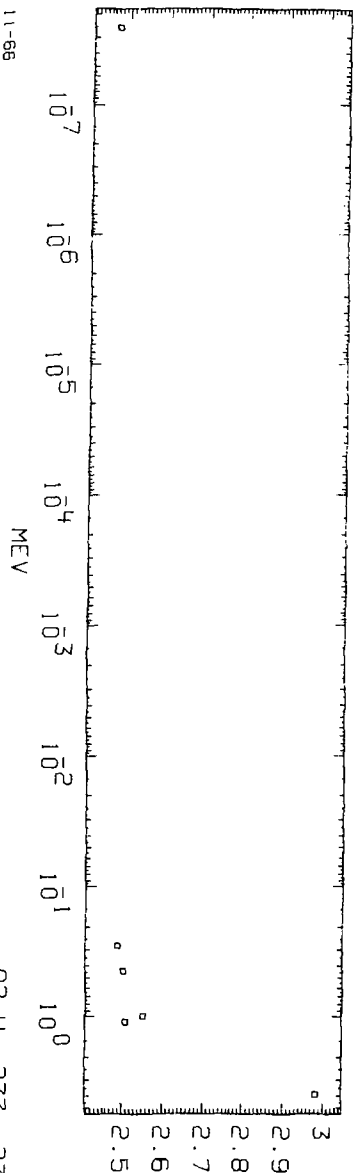
BARNs

03/01/74

NEUTRONS/FISSION
PROMPT

92-U -233

ECSIL-1073 (63)



NEUTRONS/FISSION

11-66

92-U -233 -23

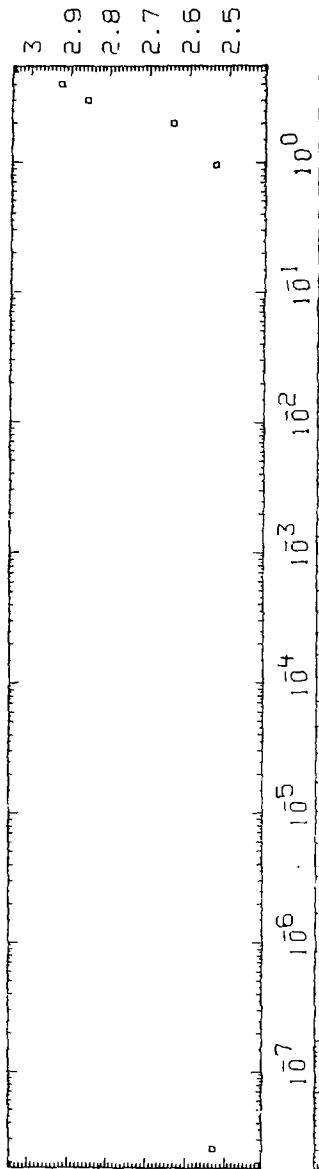
03/01/74

NEUTRONS/FISSION

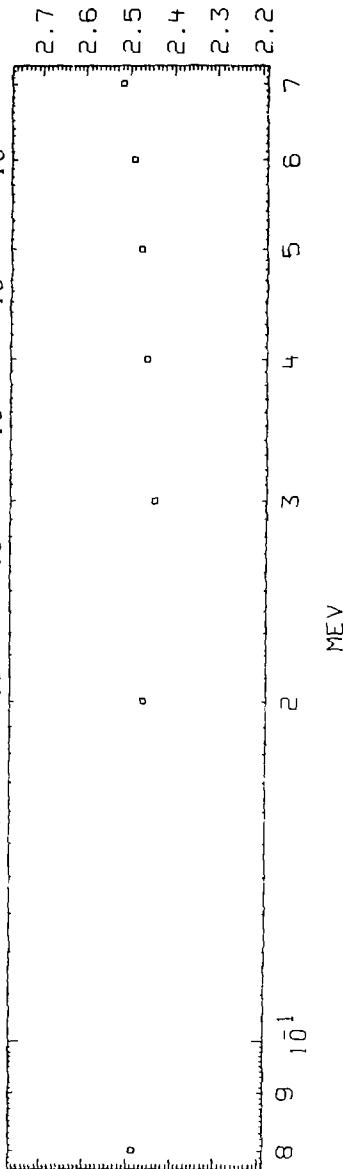
92-U -233

PROMPT

ECSIL-1074 (65)



ECSIL-226 (67)



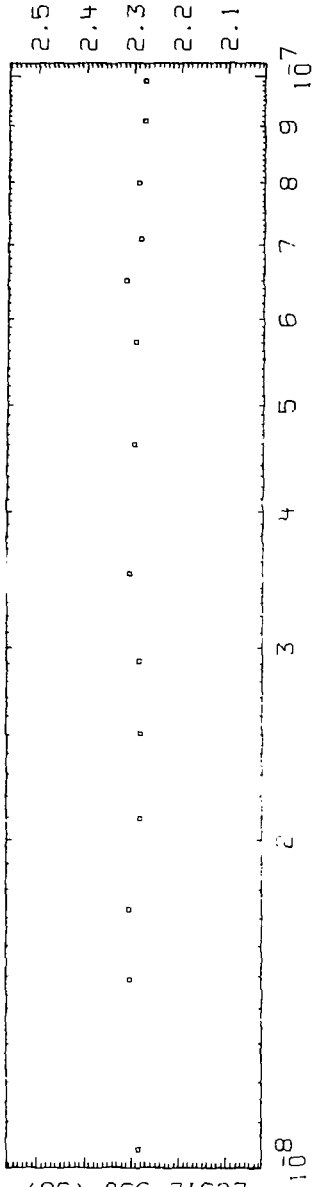
NEUTRONS/FISSION

03/01/74

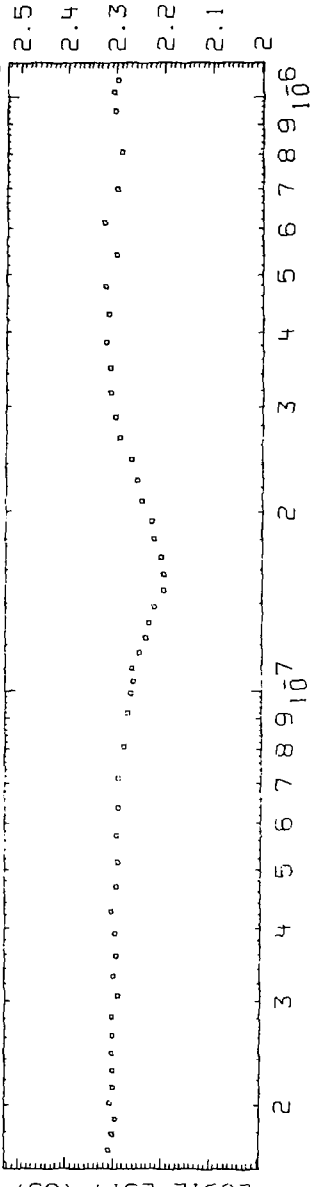
NEUTRONS/NONELASTIC
EVENT

92-U -233

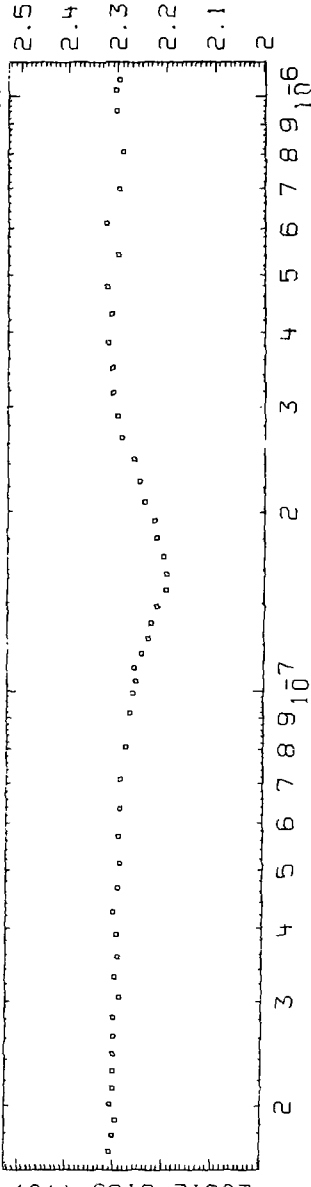
ECS1L-990 (56)



ECS1L-2514 (69)



ECS1L-3155 (70)



MEV

11-58

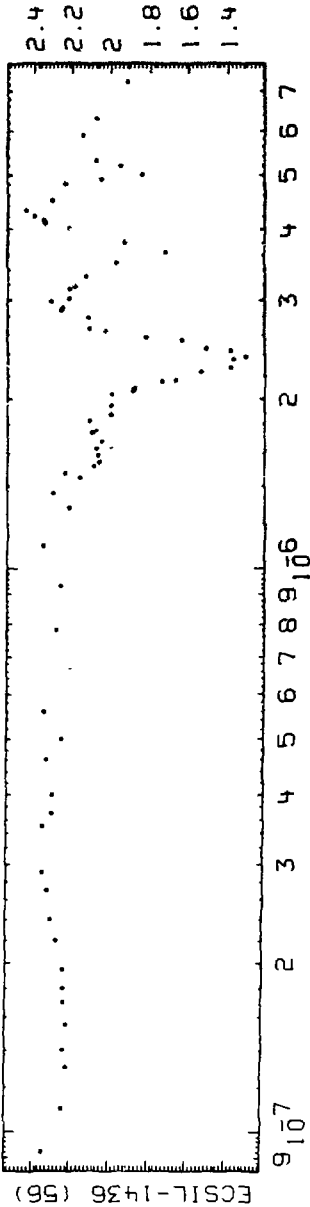
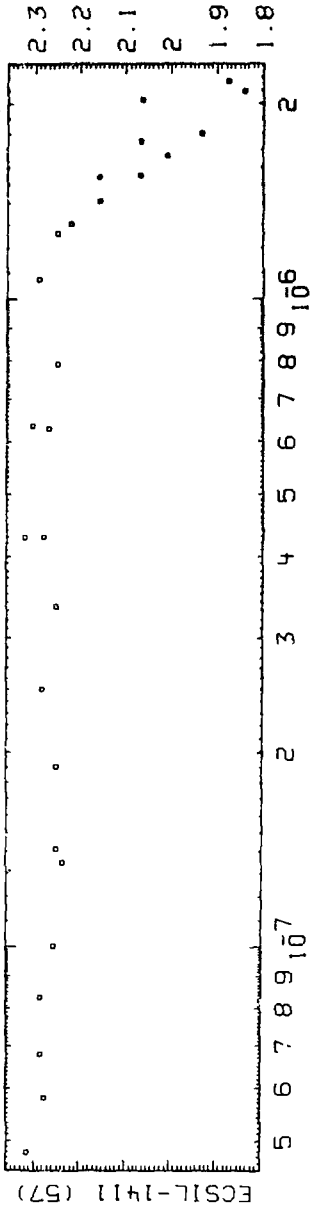
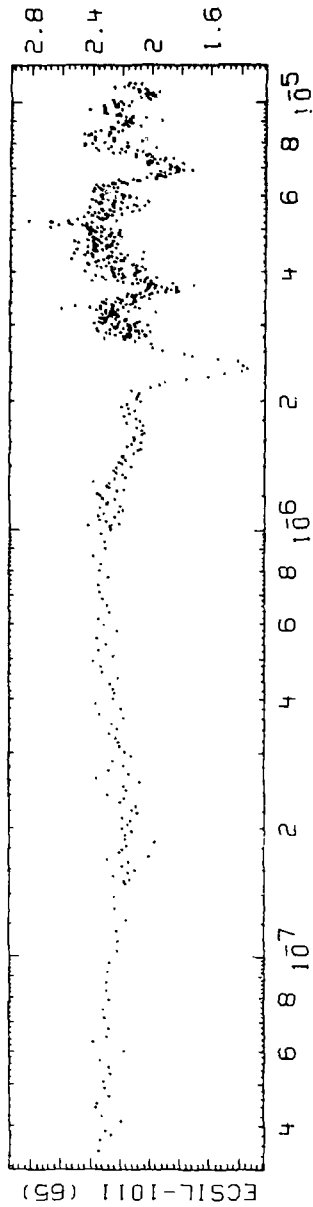
92-U -233 -25

RAT:0

03/01/74

NEUTRONS/NONELASTIC
EVENT

92-U -233



MEV

11-69

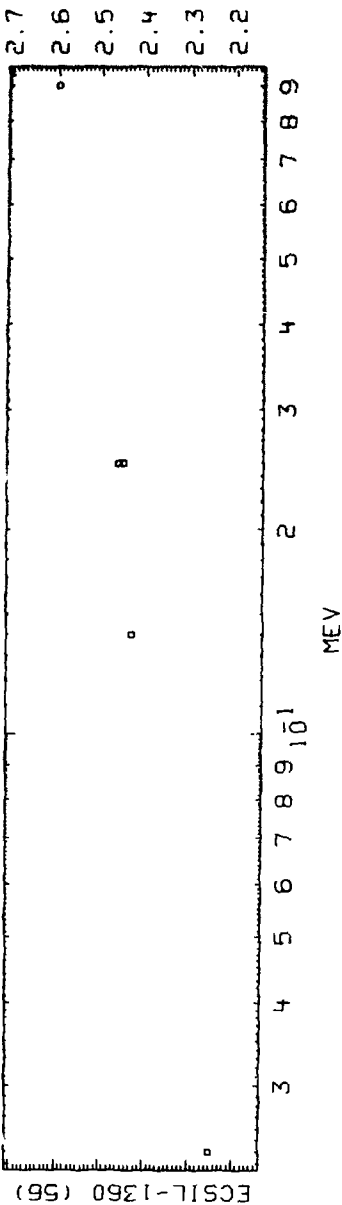
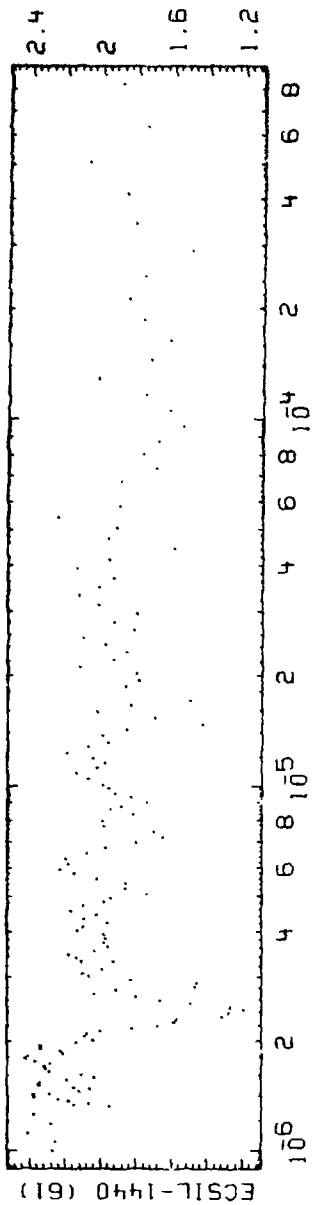
92-U -233 -26

RATIO

03/01/74

NEUTRONS/NONELASTIC
EVENT

92-U -233

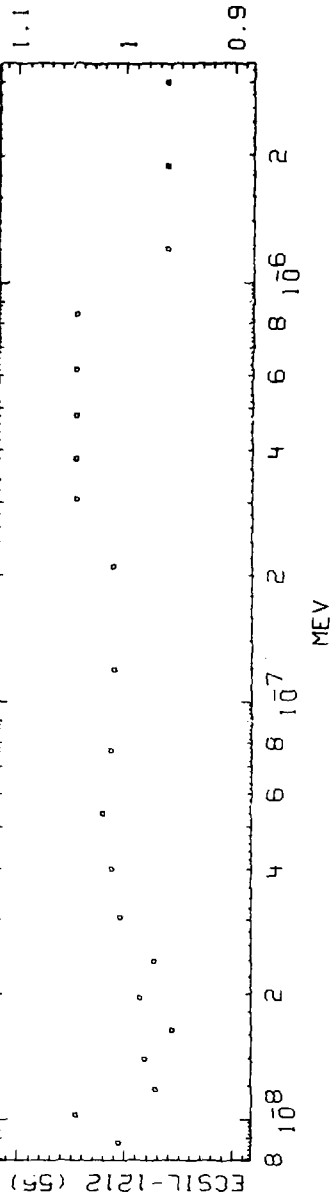


03/01/74

NEUTRONS/NONELASTIC

92-U -233

EVENT



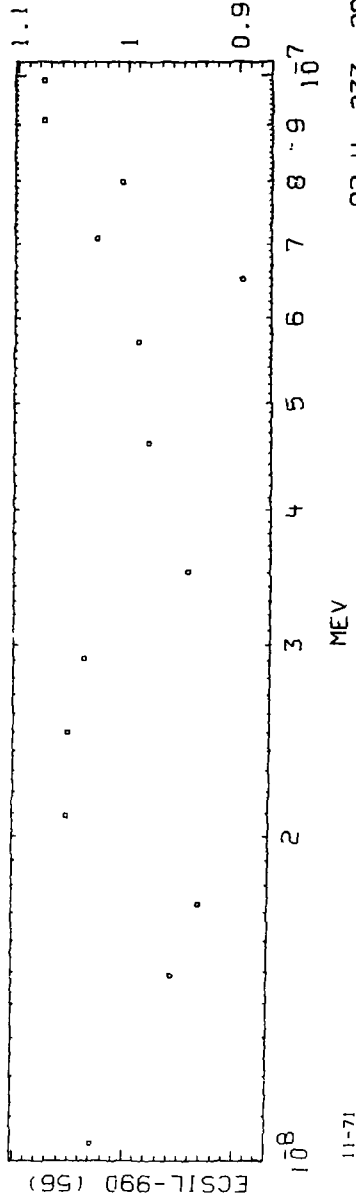
RELATIVE

03/01/74

CAPTURE/FISSION

92-U -233

RATIO



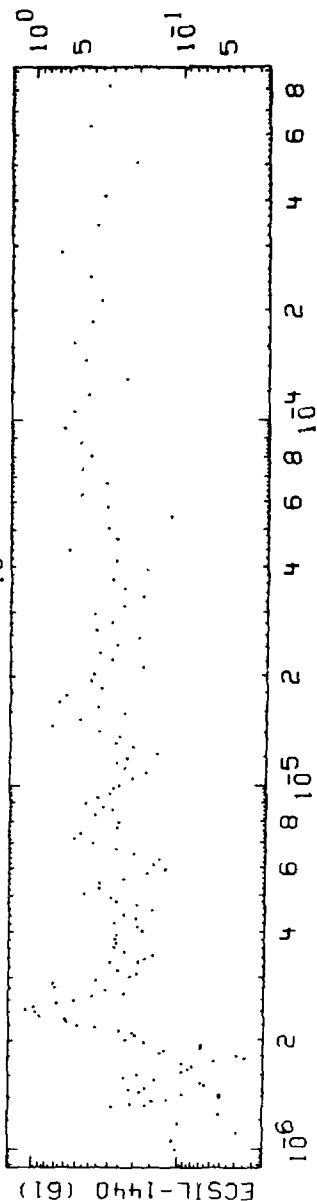
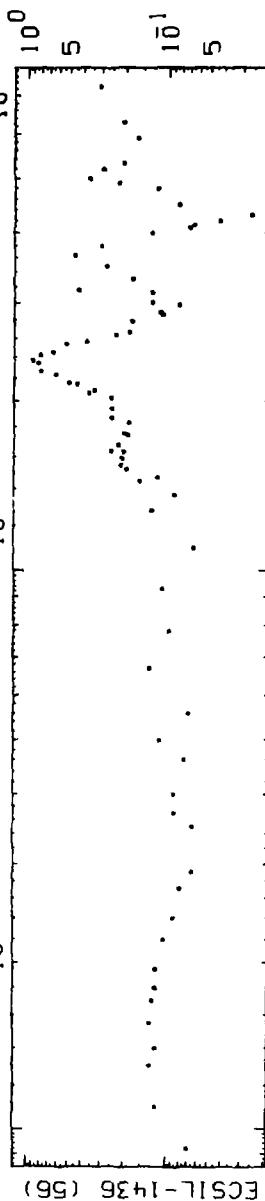
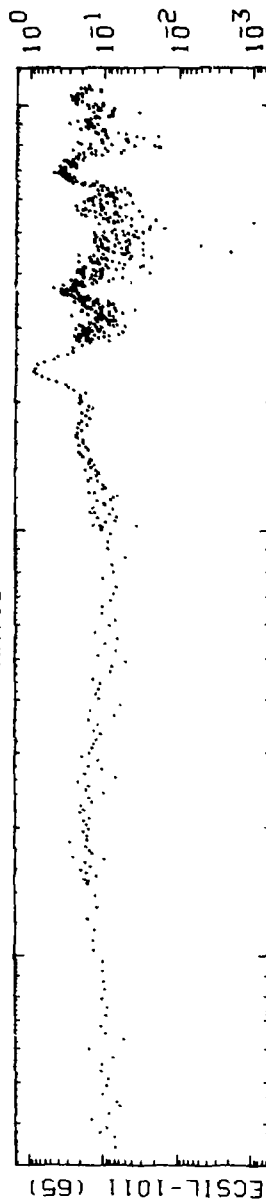
11-71

92-U -233 -28

03/01/74

CAPTURE/FISSION
RATIO

92-U -233



MEV

11-72

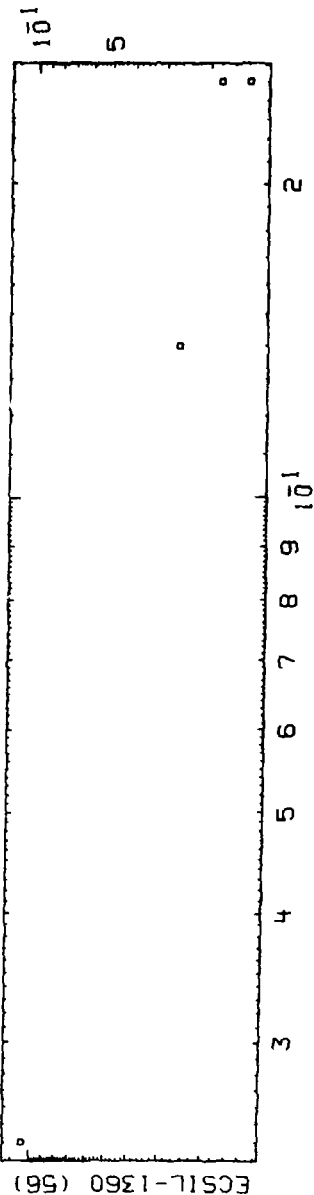
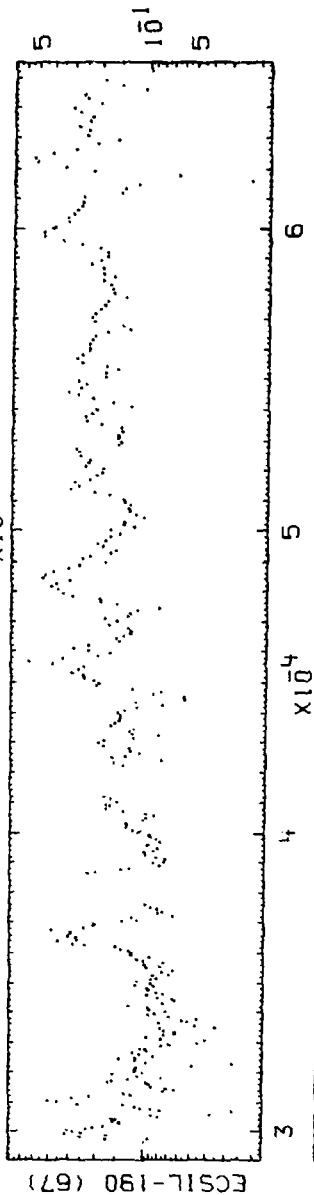
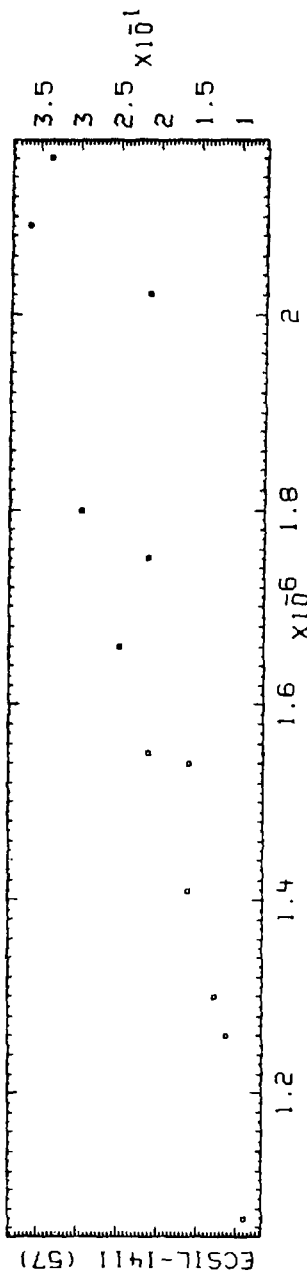
92-U -233 -29

RATIO

03/01/74

CAPTURE/FISSION
RATIO

92-U -233



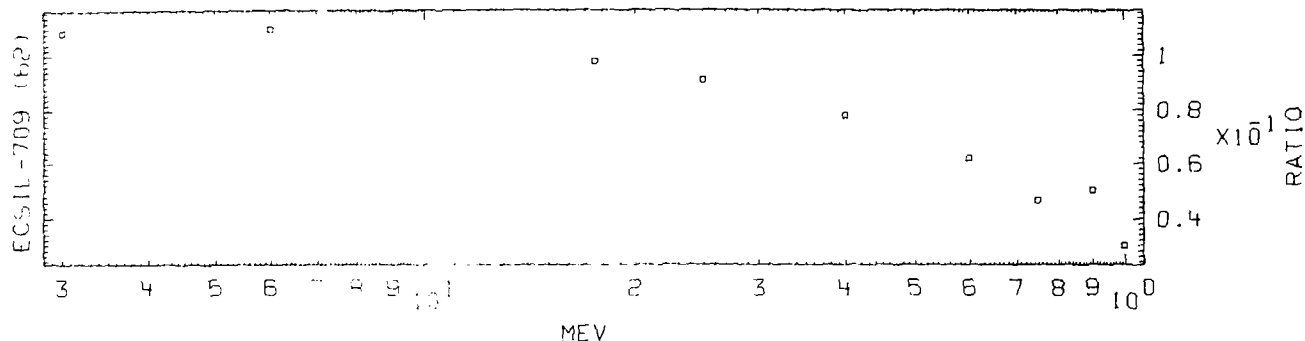
11-73

92-U -233 -30

03/01/74

CAPTURE/FISSION
RATIO

92-U -233



03/01/74

FISSION

92-U -233

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68	209	2.5300- 8	5.3460+ 2	5.3000+ 0	68	2095	2.0000- 3	4.0000- 4	7.7000+ 0
46	1313	2.5300- 8	5.0800+ 2	2.0000+ 1	65	1072	2.4000- 2	2.7300+ 0	1.1000- 1
59	1176	2.5300- 8	5.1500+ 2	1.5000+ 1	50	1413	1.4000+ 1	2.5600+ 0	1.0000- 1
58	1164	2.5300- 8	5.1800+ 2	4.0000+ 0	56	771	1.4100+ 1	2.5200+ 0	1.4000- 1

03/01/74

N.GAMMA

92-U -233

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
46	1313	2.5300- 8	5.8000+ 1		63	1441	2.5300- 8	5.1700+ 1	2.5850+ 0

03/01/74

PROMPT NEUTRONS/FISSION

92-U -233

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
55	1097	2.5300- 8	2.6000+ 0	1.0400- 1	56	1065	2.5300- 8	2.4700+ 0	1.5000- 1
55	1098	2.5300- 8	2.4800+ 0	2.4140- 2	58	1063	2.5300- 8	2.4960+ 0	1.9310- 2
55	1099	2.5300- 8	2.4500+ 0	1.5000- 1	59	1092	2.5300- 8	2.4720+ 0	2.4140- 2

11-74

92-U -233 -31

03/01/74

NEUTRONS/FISSION

92-U -233

PROMPT

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
67 1417	2.5300-8		2.4920+ 0	8.0000- 3	58 1121	4.0000+ 0	3.0000- 1	3.0600+ 0	1.2000- 1
66 1336	2.5300-8		2.5400+ 0	4.0000- 2	61 1269	1.4000+ 1		4.2300+ 0	2.4000- 1
65 1085	2.5300-8		2.4620+ 0	1.4480- 2	56 1321	1.4100+ 1		3.8600+ 0	2.8000- 1
58 1172	2.5300-8		2.4550+ 0	5.4000- 2	58 1122	1.4800+ 1		4.4000+ 0	4.5000- 1
46 1313	2.5300-8		2.6100+ 0		58 1121	1.5000+ 1	5.0000- 1	4.4200+ 0	1.7000- 1
56 1145	8.0000- 2		2.5850+ 0	6.2000- 2					

03/01/74

DELAYED NEUTRONS/FISSION

92-U -233

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
45 1461	2.5000-8		5.4400- 3		69 1533	3.1000+ 0	2.0000- 1	7.7000- 3	8.0000- 4
55 1426	2.5000-8		2.5900- 3		61 1410	1.4000+ 1		1.4000- 2	4.0000- 3
57 1066	2.5000-8		6.6000- 3	3.0000- 4	69 1533	1.4900+ 1	5.0000- 1	4.3000- 3	4.0000- 4
71 3159	2.5000-8		6.7000- 3	2.0000- 4	63 2527	1.5000+ 1		1.2000- 2	1.0000- 3
1 55 1341	2.0000+ 0	1.0000+ 0	6.8160- 3	5.4400- 4					

03/01/74

NEUTRONS/NONELASTIC EVENT

92-U -233

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
65 1076	2.5000-8		2.2980+ 0	9.0000- 3	60 1287	2.5300-8		2.2960+ 0	1.0000- 2
55 1099	2.5000-8		2.1800+ 0	8.0000- 2	70 1289	2.5300-8		2.2920+ 0	
46 1313	2.5300-8		2.3400+ 0	6.0000- 2	70 1290	2.5300-8		2.2920+ 0	1.5000- 2
48 1314	2.5300-8		2.3800+ 0	8.0000- 2	56 1416	2.6000-8		2.2900+ 0	3.0000- 2
54 1385	2.5300-8		2.2500+ 0	5.0000- 2	65 1076	5.7000-8		2.2880+ 0	9.0000- 3
59 1285	2.5300-8		2.2500+ 0	3.0000- 2	61 1269	1.4000+ 1		4.0700+ 0	2.2000- 1

11-75

92-U -233 -32

03/01/74

CAPTURE/FISSION
RATIO

92-U -233

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
58 1280	1.1000- 9		1.1300- 1	1.8000- 2
55 1099	2.5000- 8		1.4400- 1	4.1980- 2
65 1076	2.5000- 8		8.5290- 2	4.2500- 3
54 1385	2.5300- 8		1.0840- 1	2.4630- 2
60 1287	2.5300- 8		8.6240- 2	4.7310- 3
48 1314	2.5300- 8		4.7900- 2	3.5220- 2
62 1290	2.5300- 8		8.8130- 2	7.1210- 3
59 1285	2.5300- 8		1.0840- 1	1.4780- 2
62 1289	2.5300- 8		7.6390- 2	1.8580- 2
46 1313	2.5300- 8		1.1400- 1	
64 1433	2.5300- 8		9.3900- 2	9.0000- 4
66 1312	2.5300- 8		9.2300- 2	4.9000- 3
56 1077	2.5300- 8		9.9700- 2	1.0000- 3
56 1416	2.6000- 8		8.9080- 2	1.4270- 2
65 1076	5.7000- 8		9.0030- 2	4.2860- 3

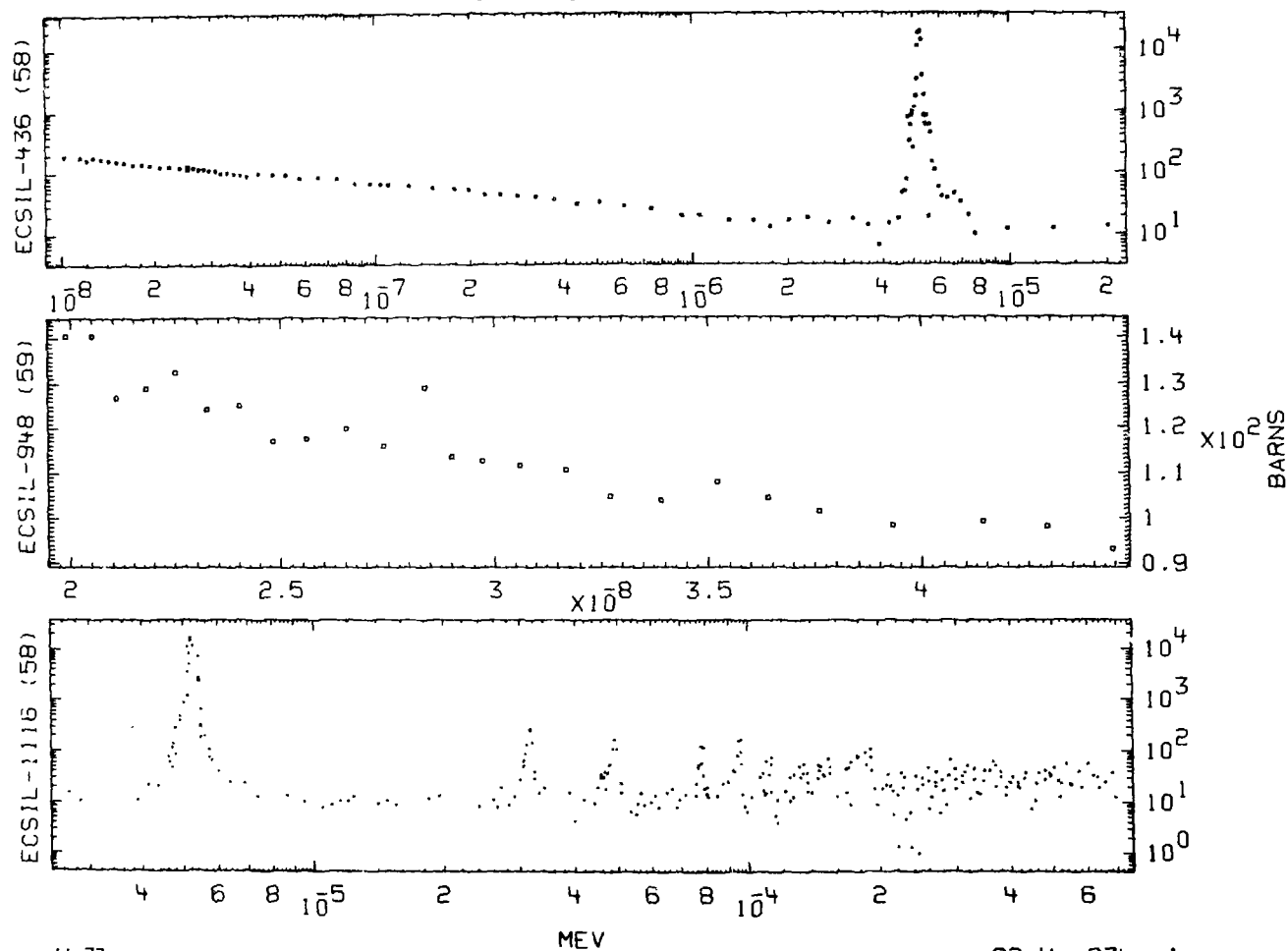
11-76

92-U -233 -33

03/01/74

TOTAL
CROSS SECTION

92-U -234



11-77

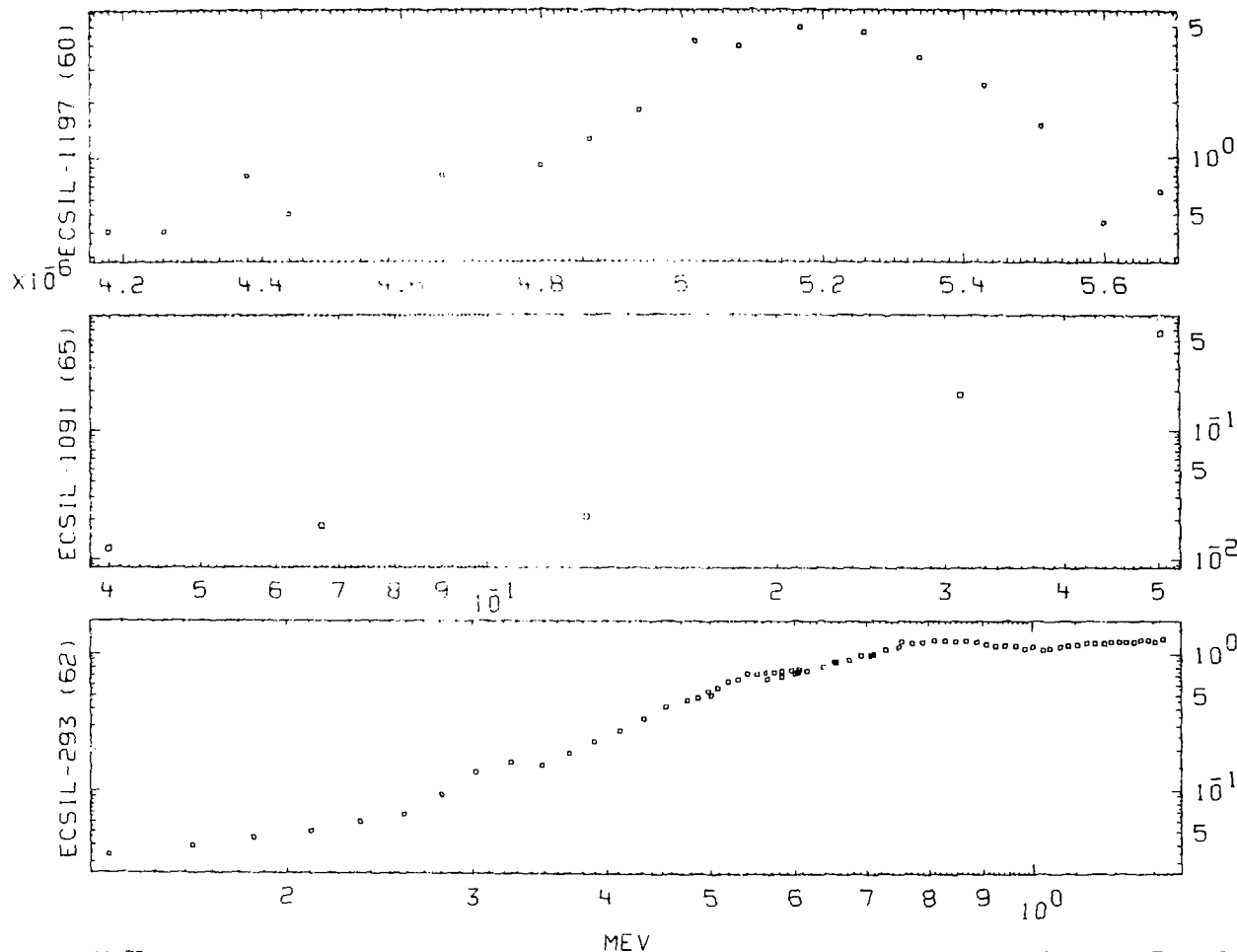
MEV

92-U -234 -1

03/01/74

FISSION
CROSS SECTION

92-U -234



11-78

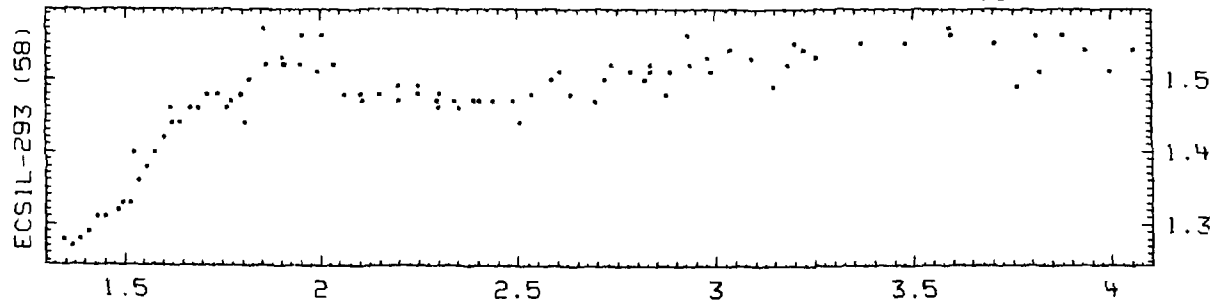
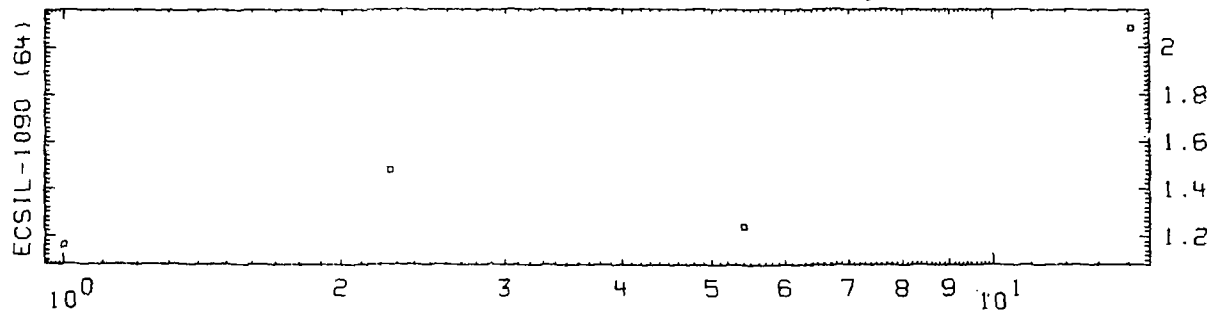
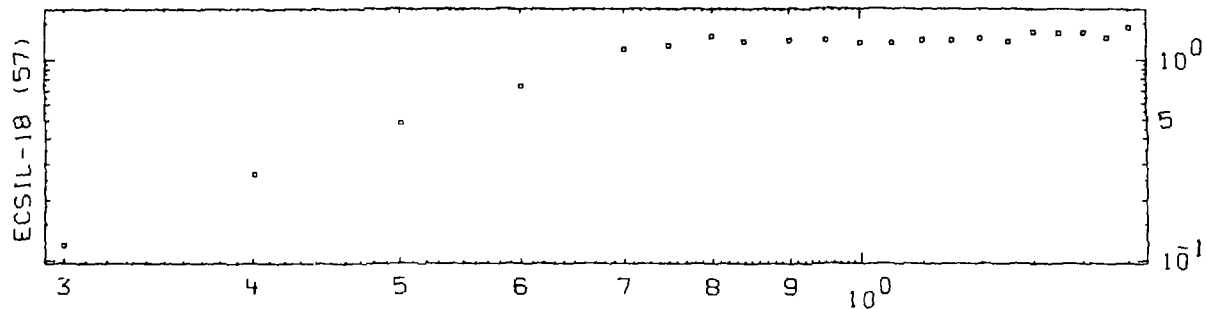
MEV

92-U -234 -2

03/01/74

FISSION
CROSS SECTION

92-U -234



BARNs

11-79

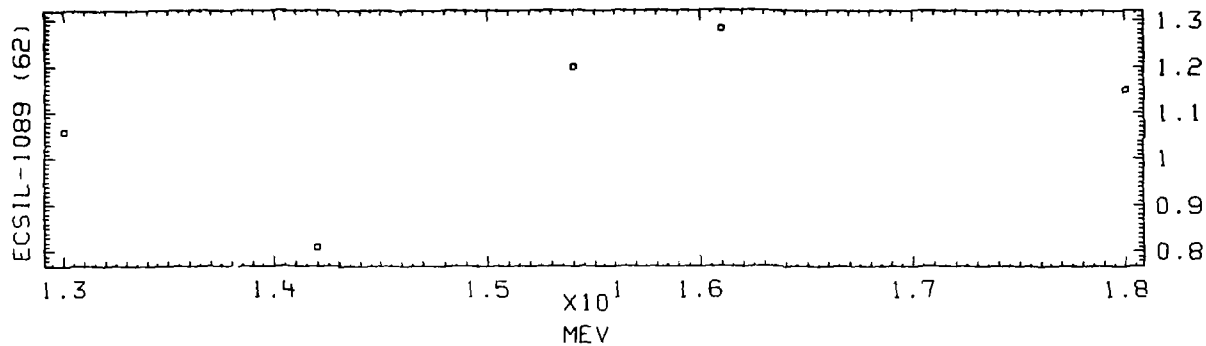
MEV

92-U -234 -3

03/01/74

FISSION
CROSS SECTION

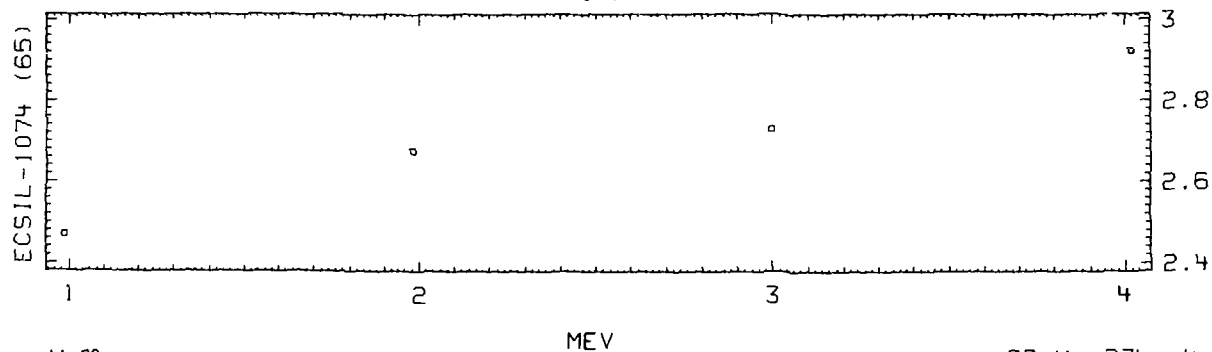
92-U -234



03/01/74

NEUTRONS/FISSION
PROMPT

92-U -234



11-80

92-U -234 -4

03/01/74

ELASTIC
CROSS SECTION

92-U -234

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 436 2	5300- 8		1.7800+ 1	1.4000+ 0

03/01/74

FISSION

92-U -234

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65 1072 2	2.4000- 2		1.5000- 2	4.0000- 3

03/01/74

N.GAMMA

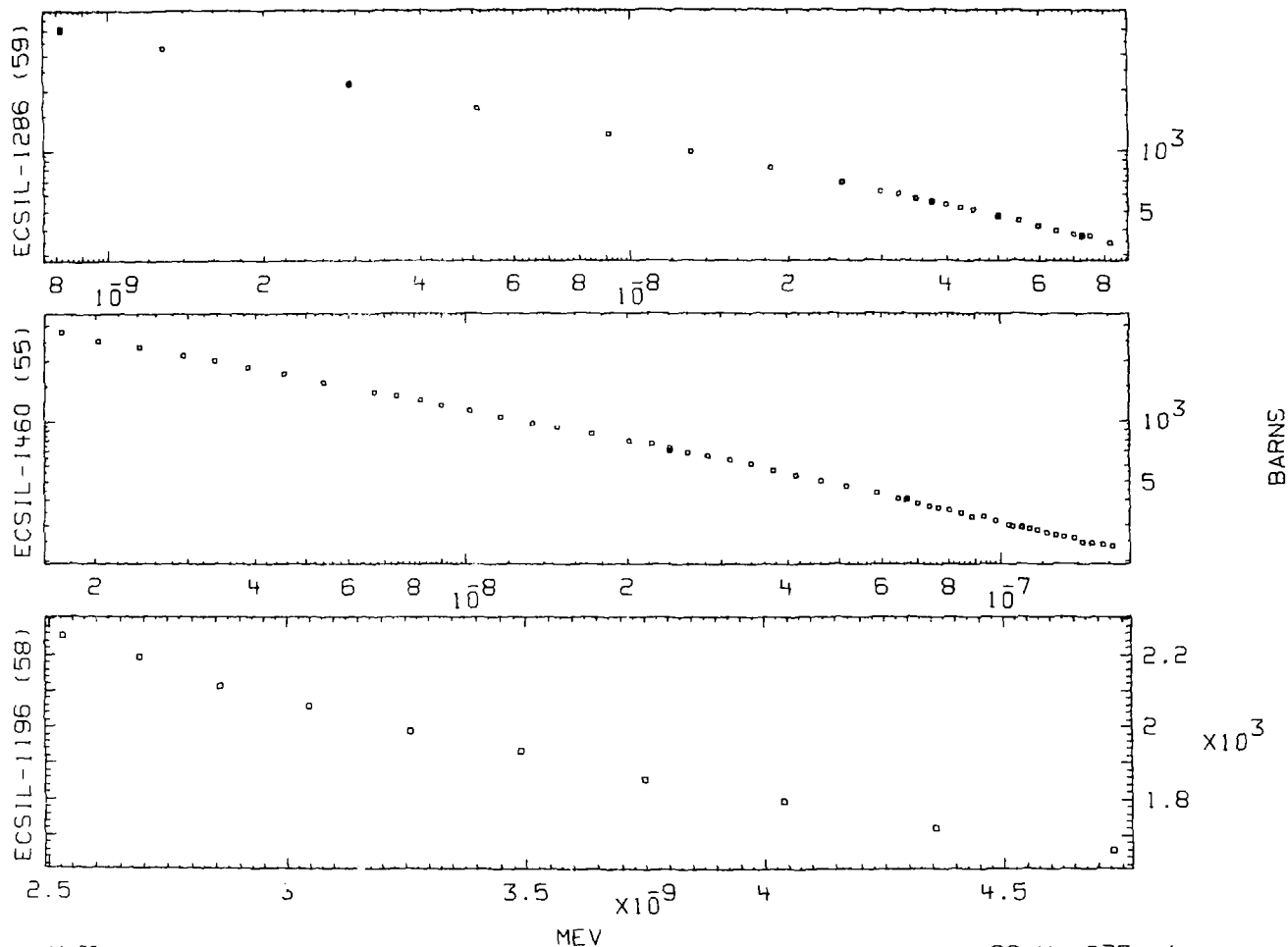
92-U -234

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
70 2415 2	2.5300- 8		9.5600+ 1	2.1000+ 0

03/01/74

TOTAL
CROSS SECTION

92-U -235



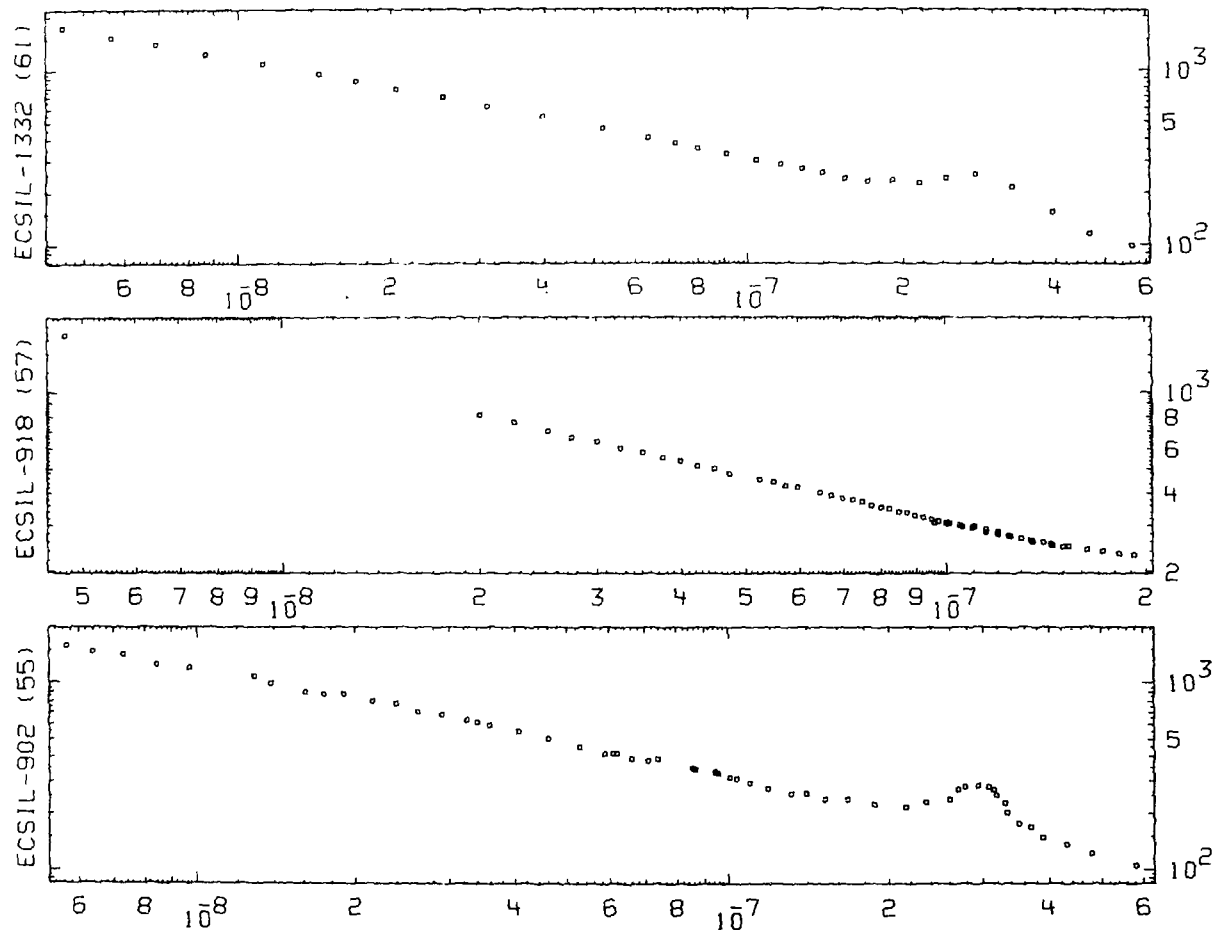
11-82

92-U -235 -1

03/01/74

TOTAL
CROSS SECTION

92-U -235



11-83

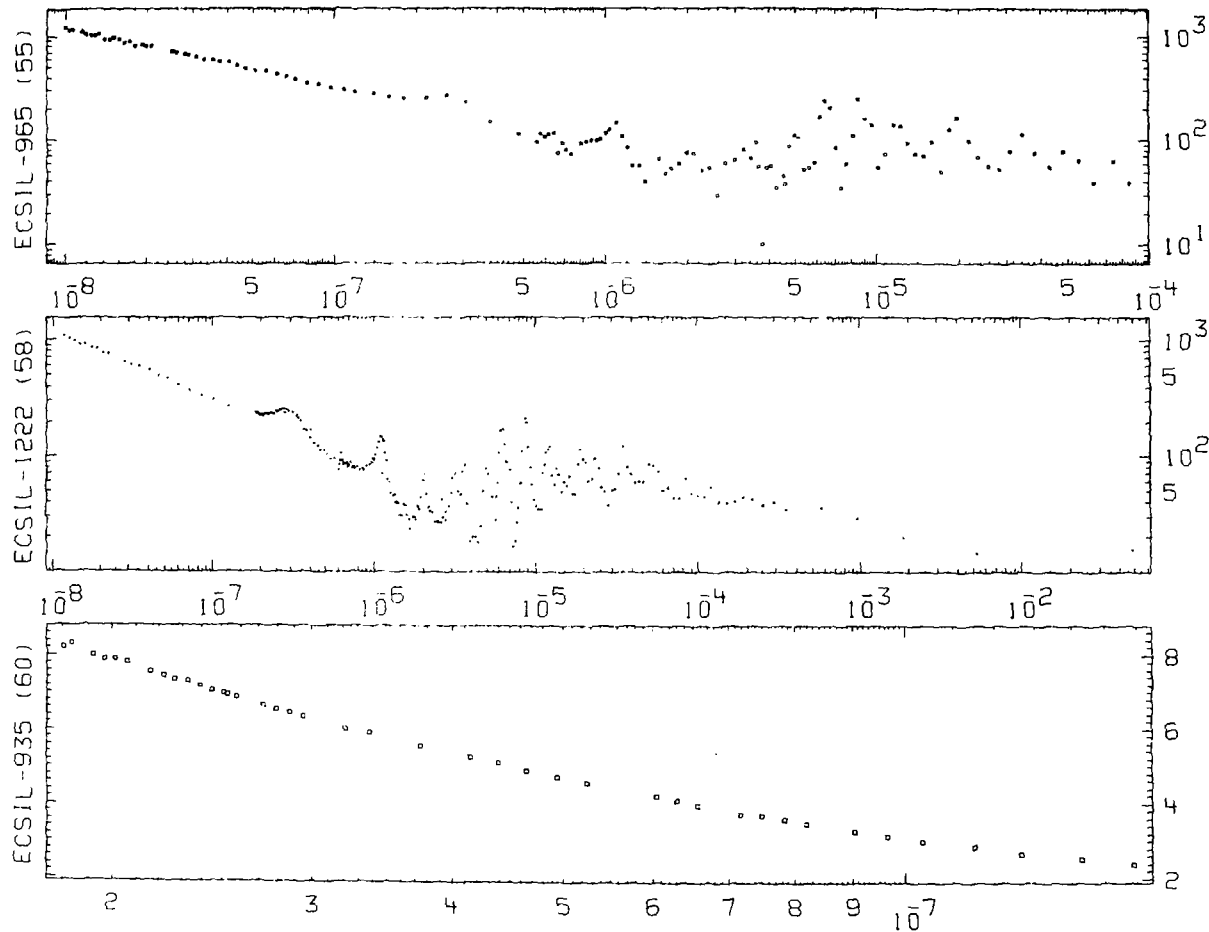
MEV

92-U -235 -2

03/01/74

TOTAL
CROSS SECTION

92-U -235



11-84

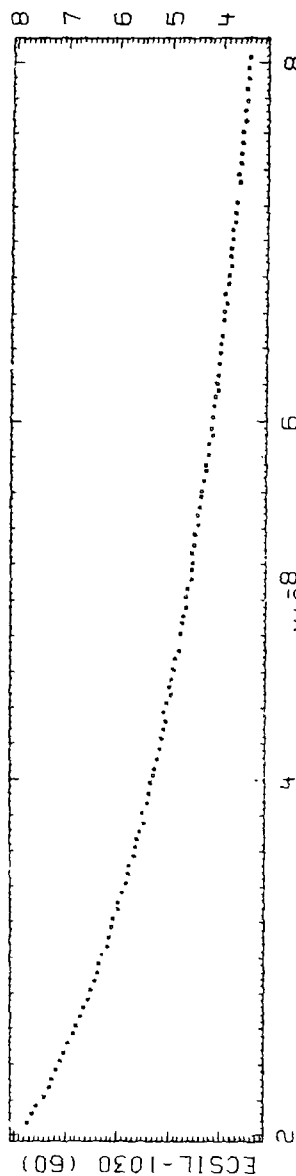
MEV

92-U -235 -3

03/01/74

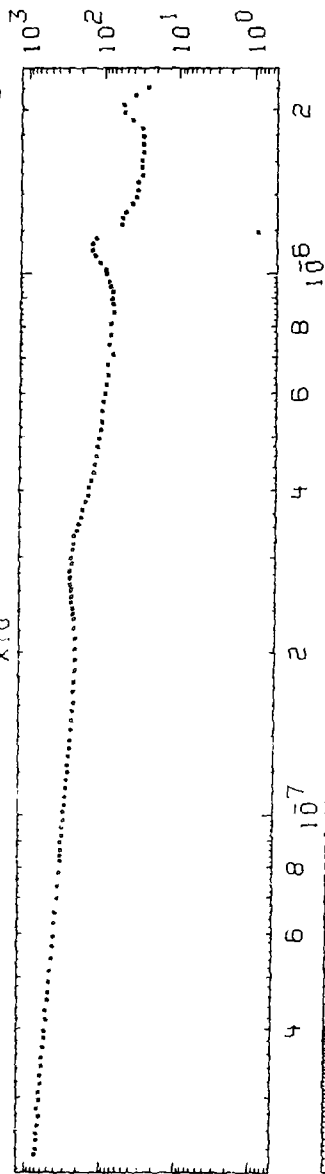
92-U -235

TOTAL CROSS SECTION



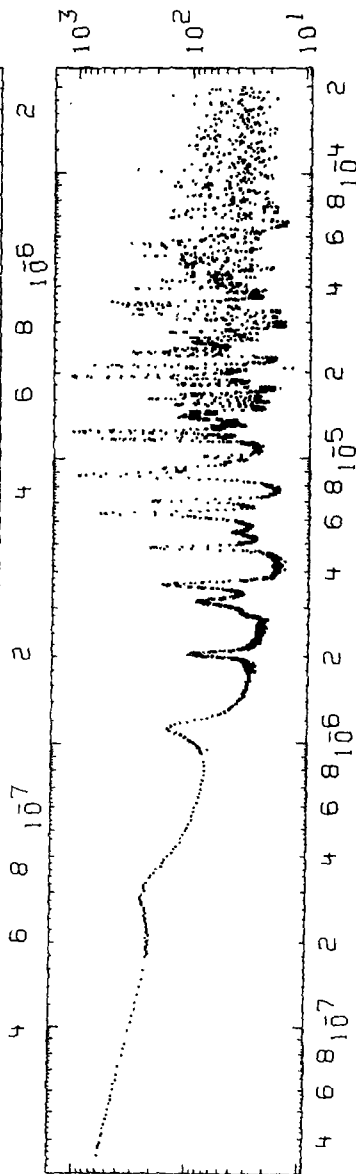
$\times 10^2$

ECSIL-1359 (62)



BARNs

(EXPANDED BELOW)
ECSIL-1011 (65)



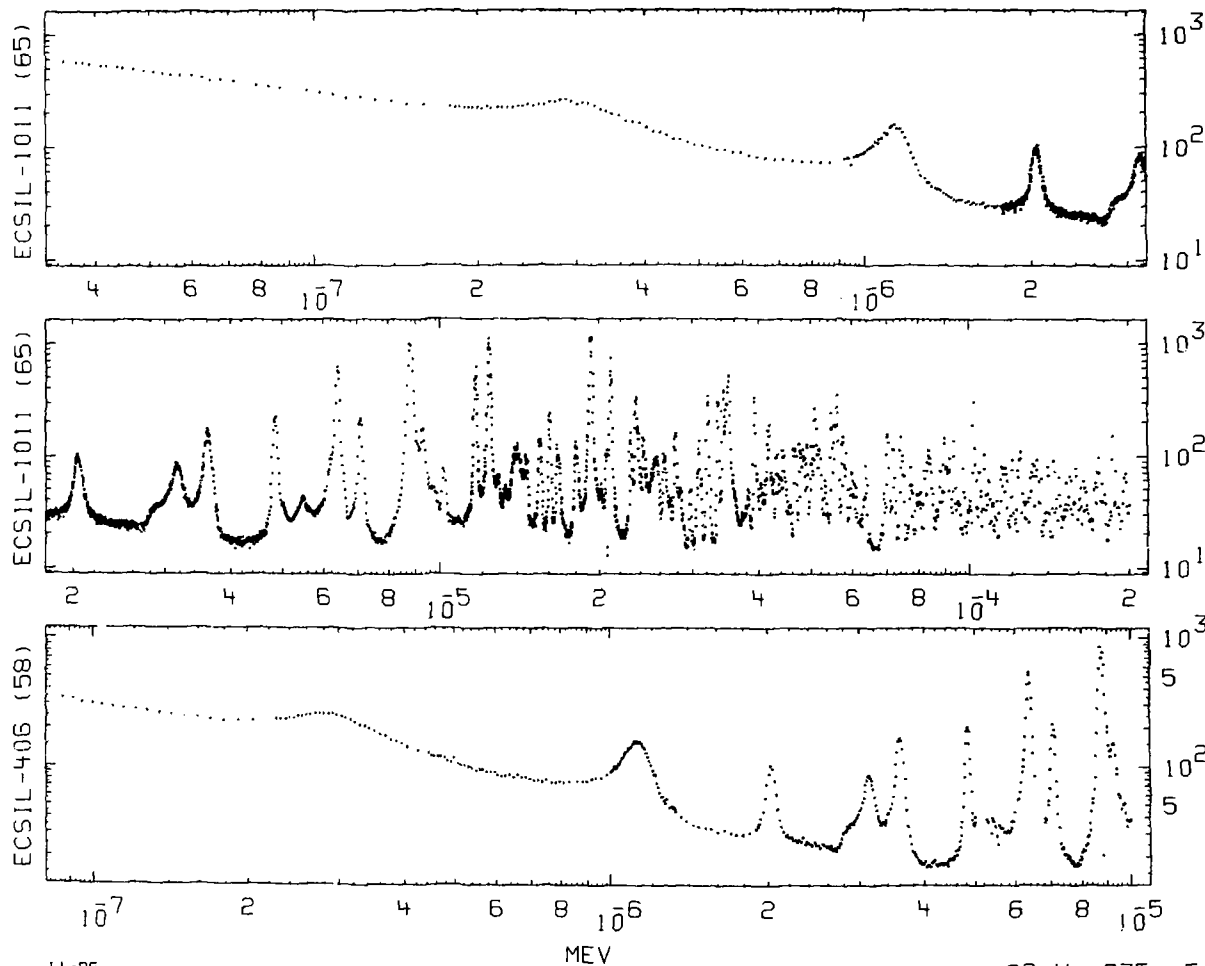
11-85

92-U -235 -4

03/01/74

TOTAL
CROSS SECTION

92-U -235



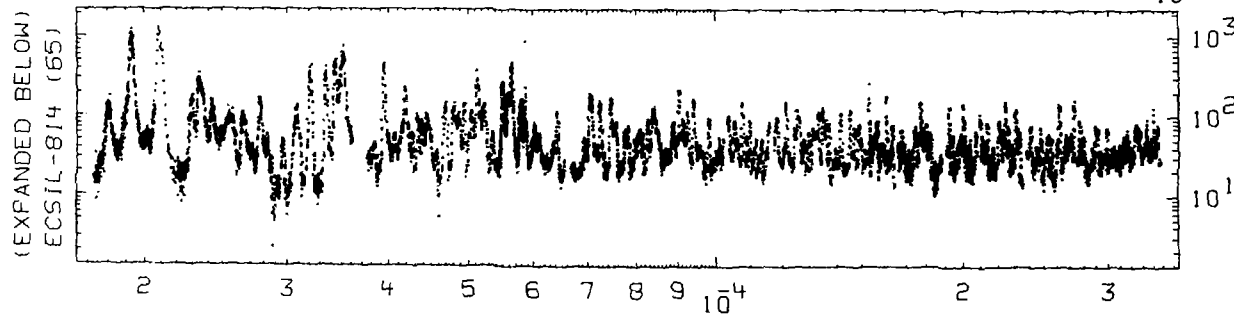
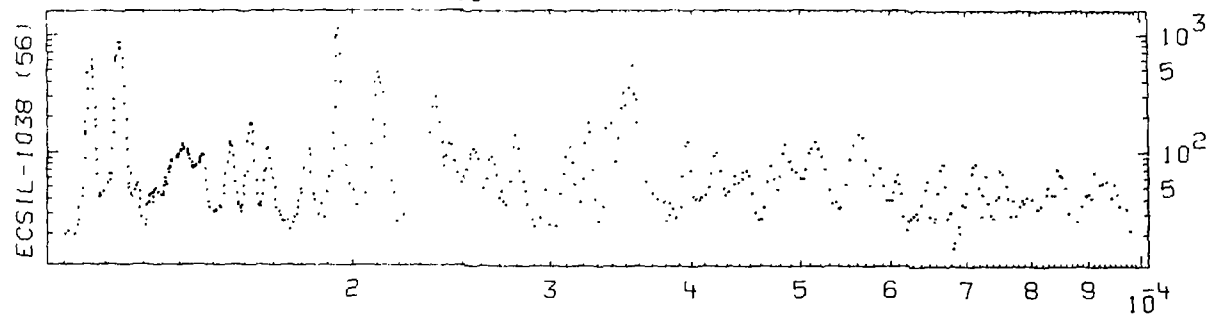
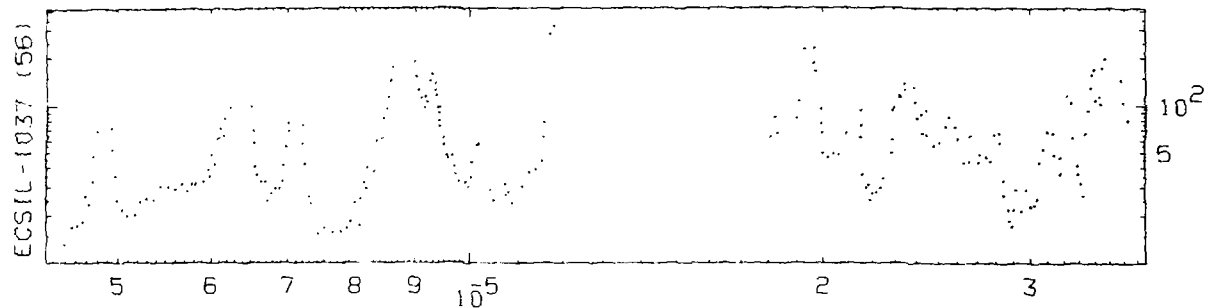
11-86

92-U -235 -5

03/01/74

TOTAL
CROSS SECTION

92-U -235



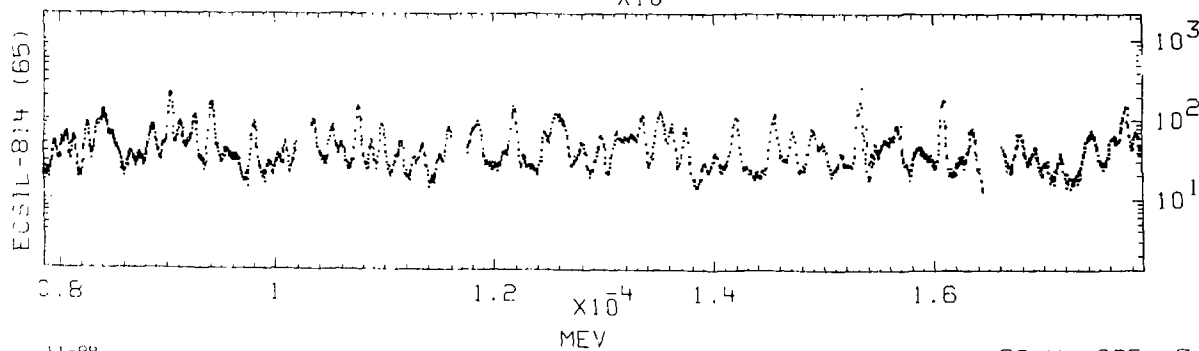
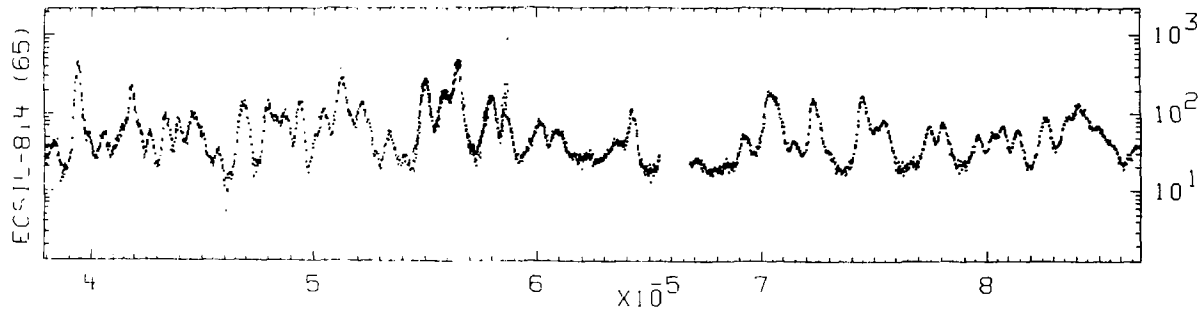
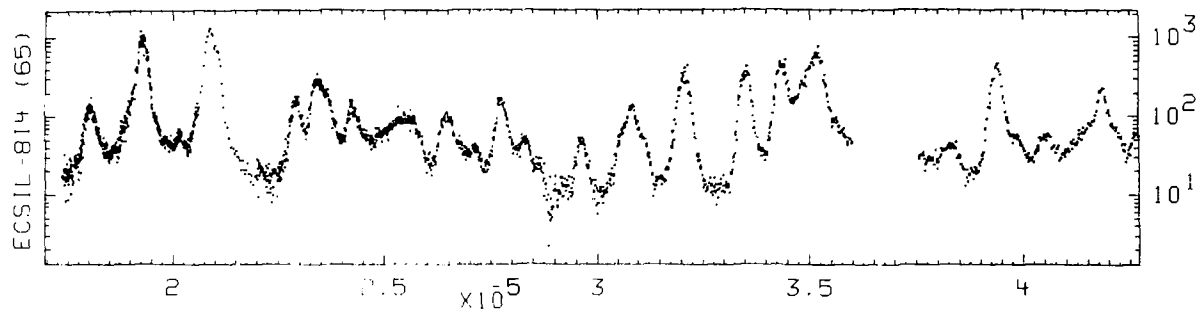
11-87

92-U -235 -6

03/01/74

TOTAL
CROSS SECTION

92-U -235



BARNs

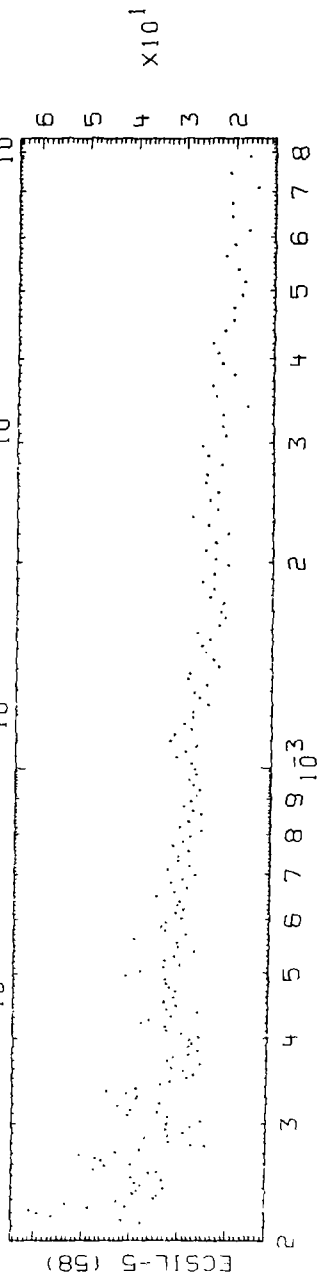
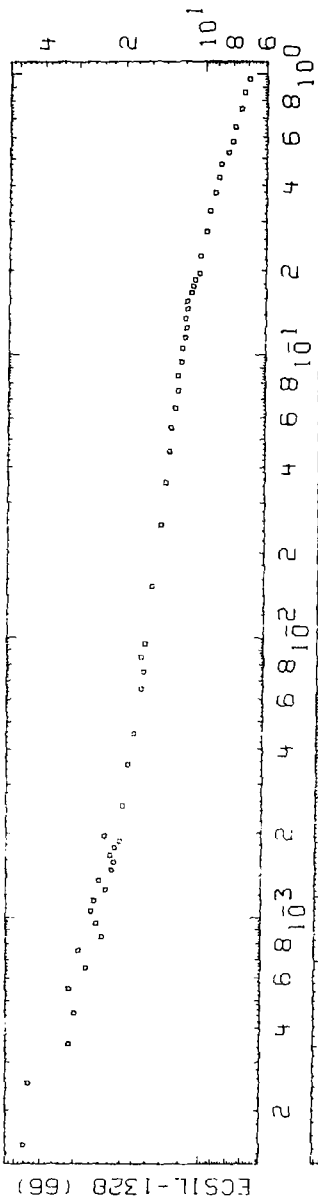
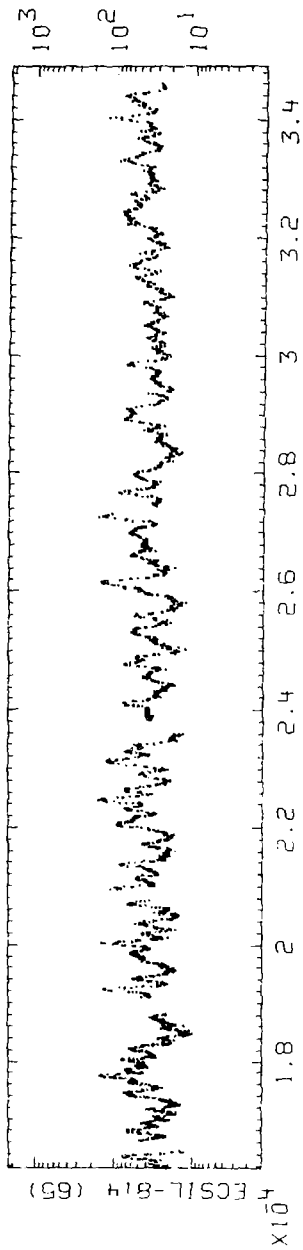
11-28

92-U -235 -7

03/01/74

TOTAL
CROSS SECTION

92-U -235



BARNs

MEV

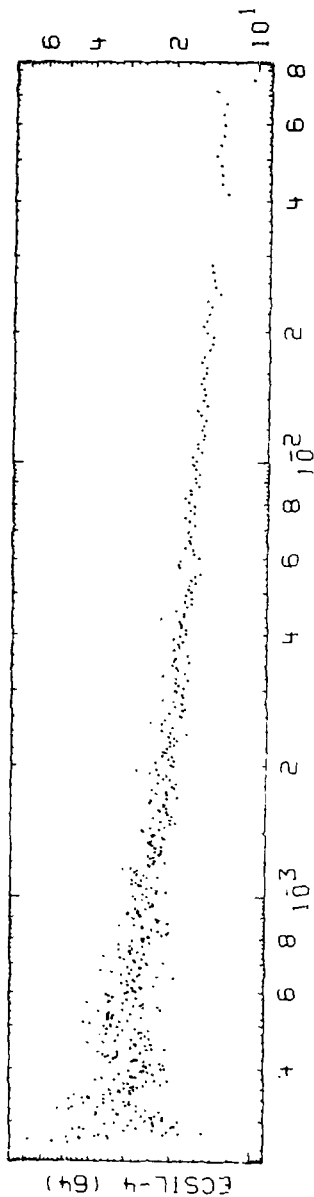
11-89

92-U -235 -8

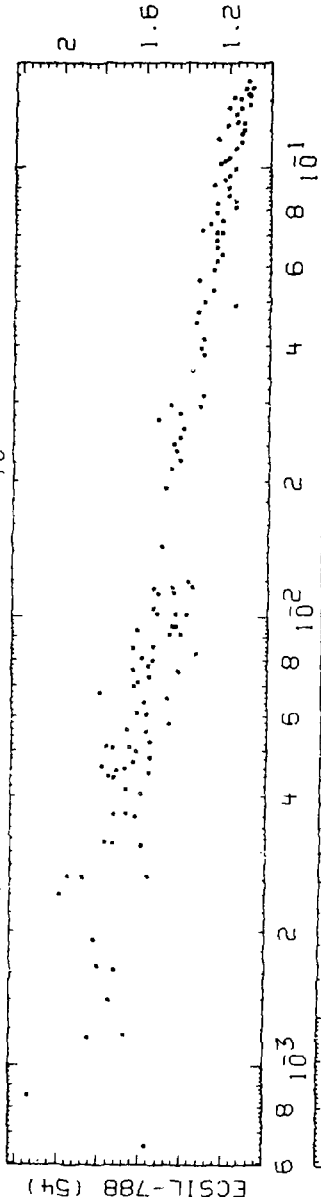
03/01/74

TOTAL
CROSS SECTION

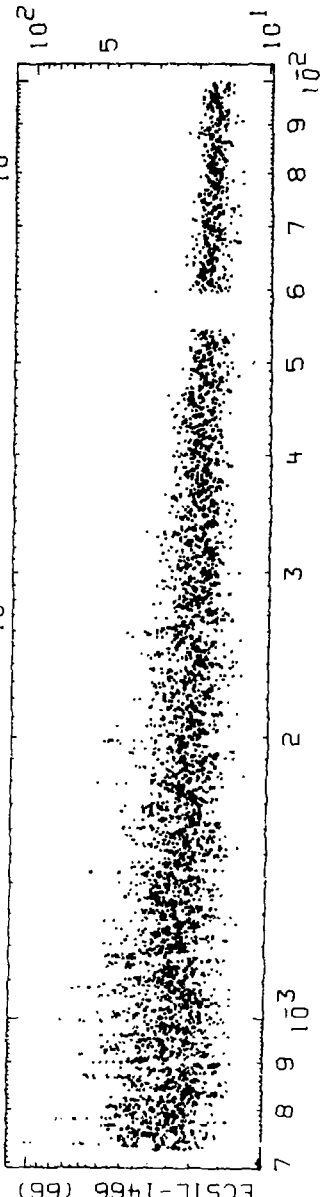
92-U -235



EC51L-4 (64)



EC51L-788 (54)



EC51L-1466 (66)

MEV

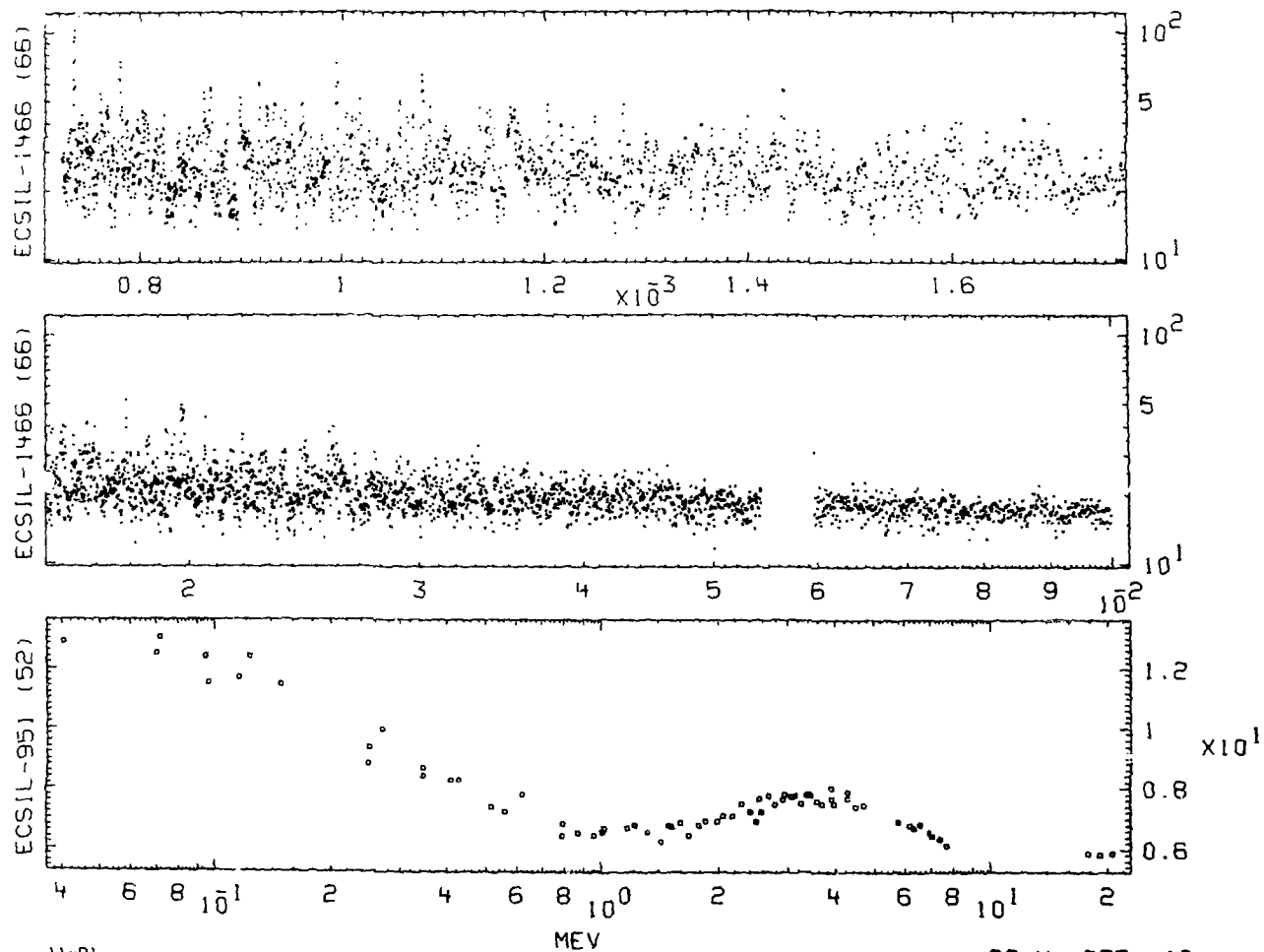
11-90

92-U -235 -9

03/01/74

TOTAL
CROSS SECTION

92-U -235



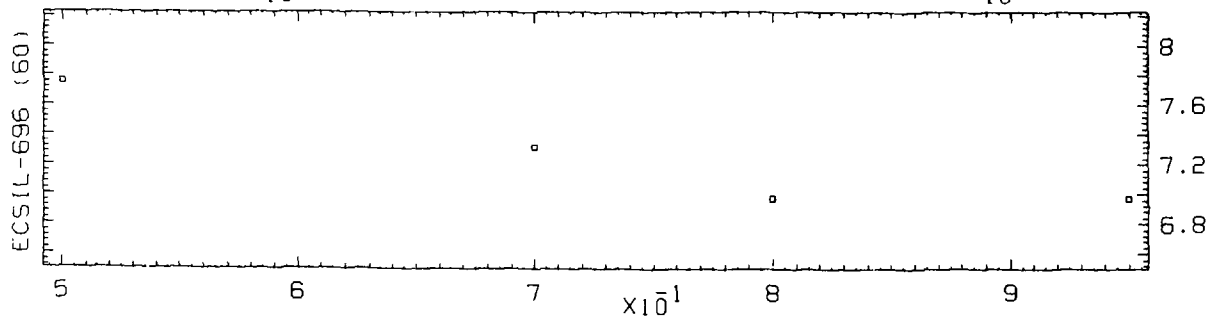
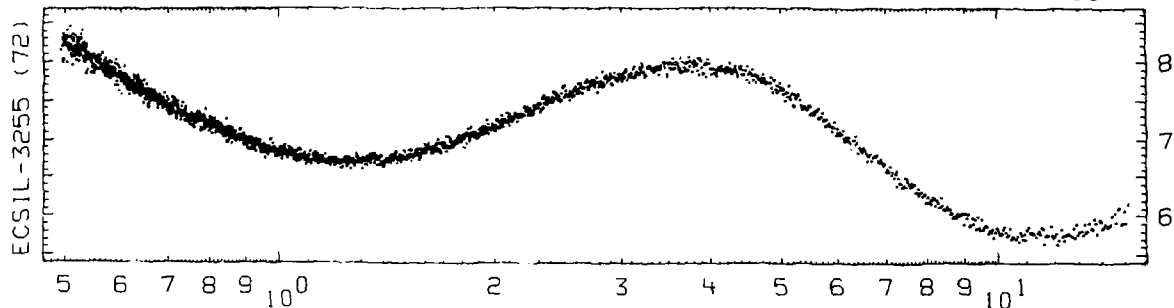
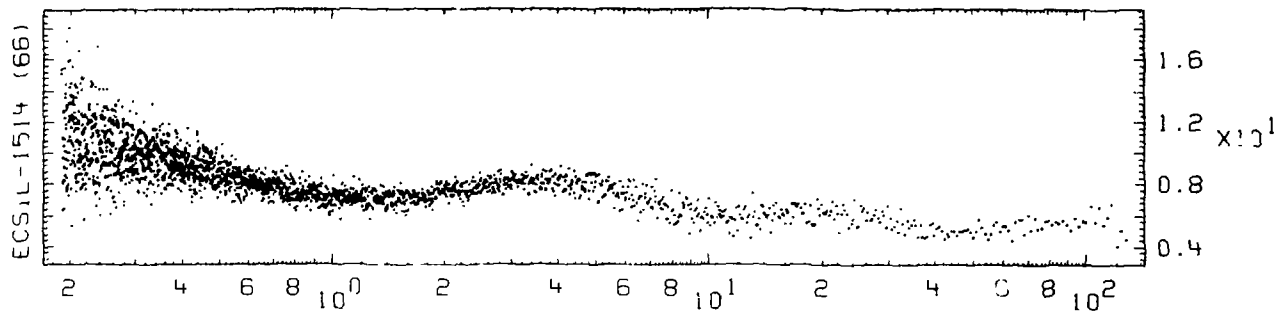
11-91

92-U -235 -10

03/01/74

TOTAL
CROSS SECTION

92-U -235



11-92

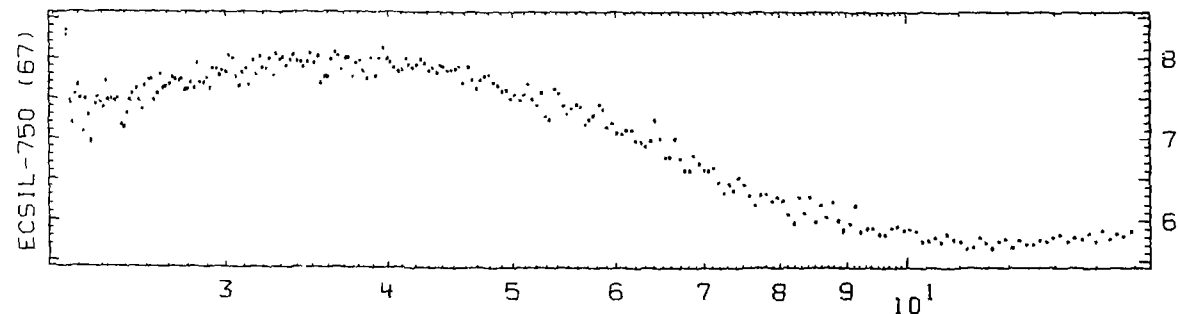
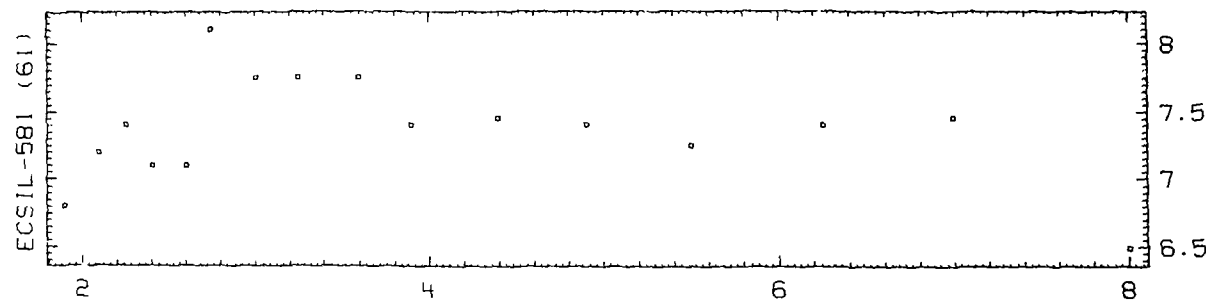
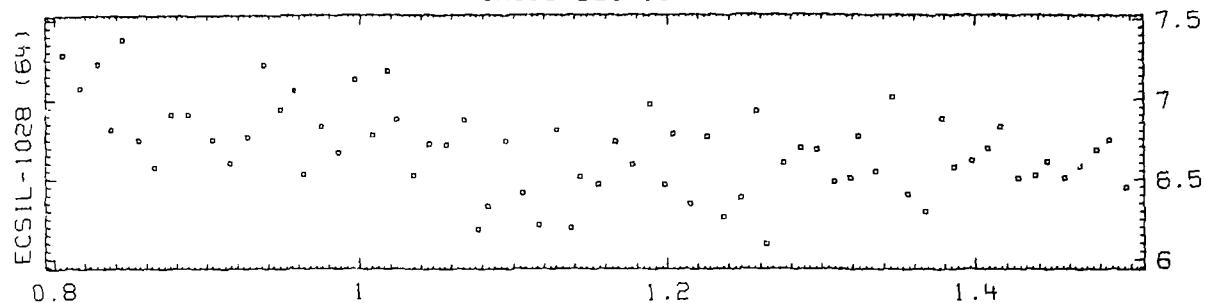
MEV

92-U -235 -11

03/01/74

TOTAL
CROSS SECTION

92-U -235



BARNs

11-93

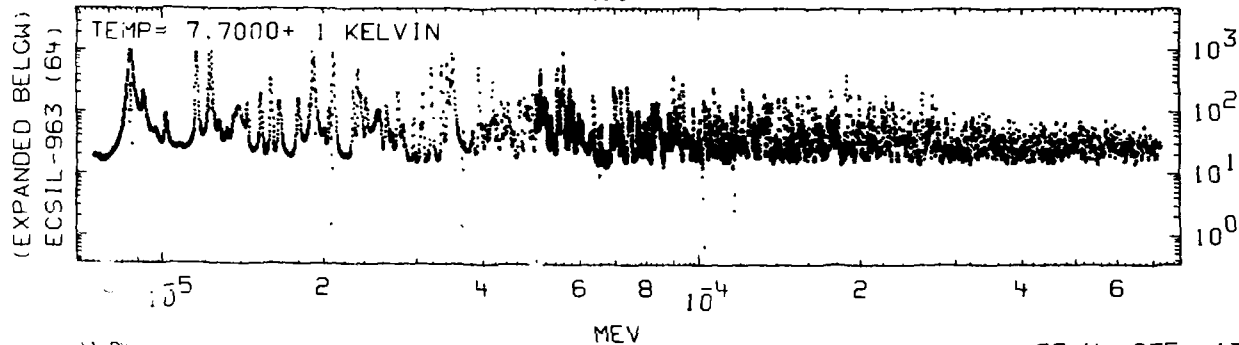
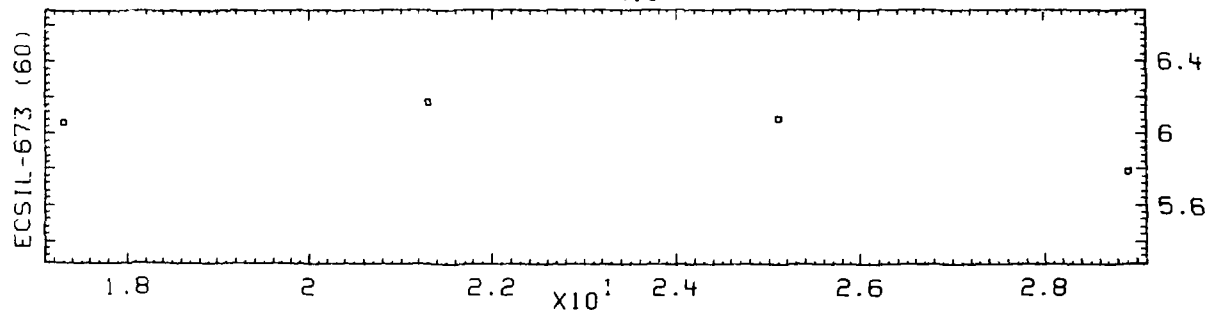
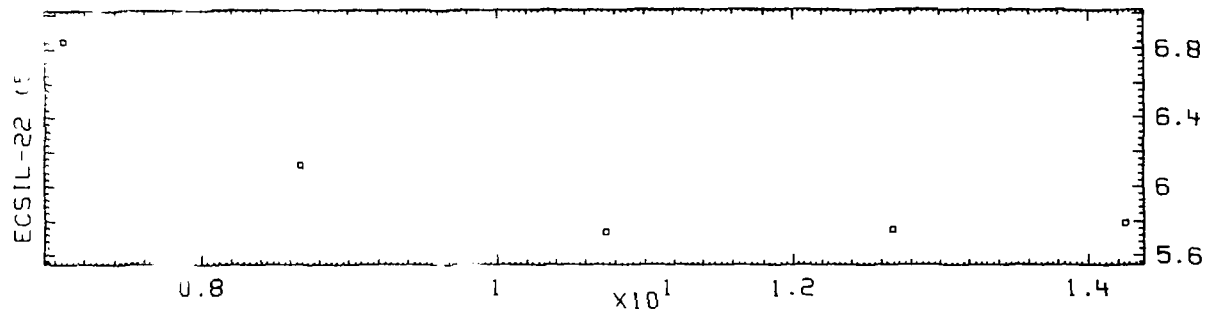
MEV

92-U -235 -12

03/01/74

TOTAL
CROSS SECTION

92-U -235



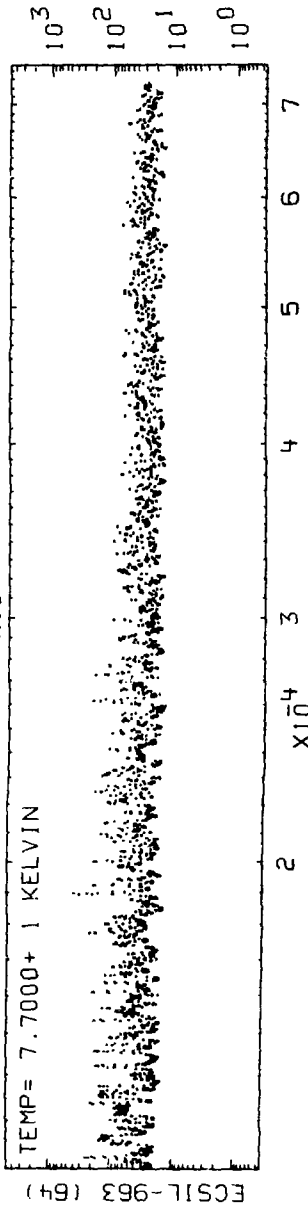
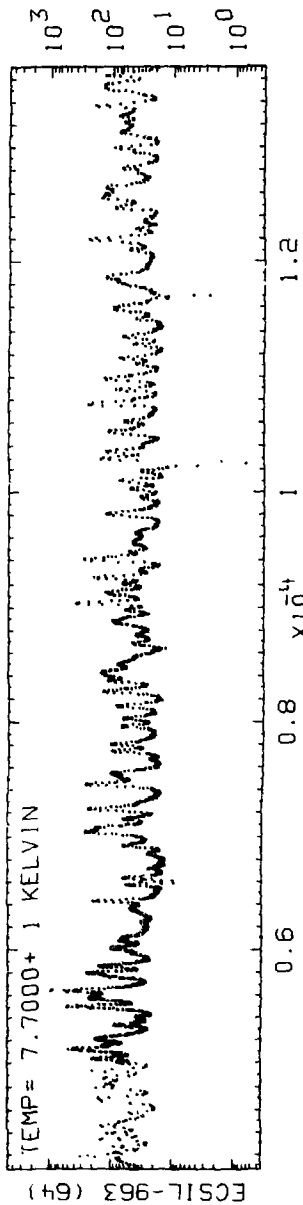
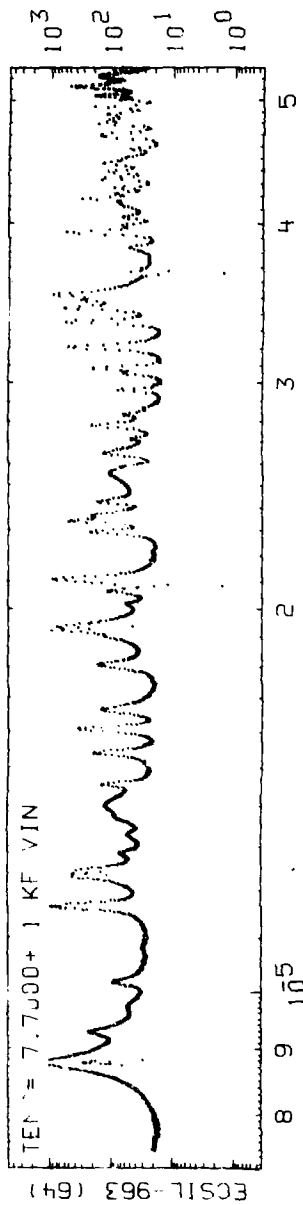
11-94

92-U -235 -13

03/01/74

92-U -235

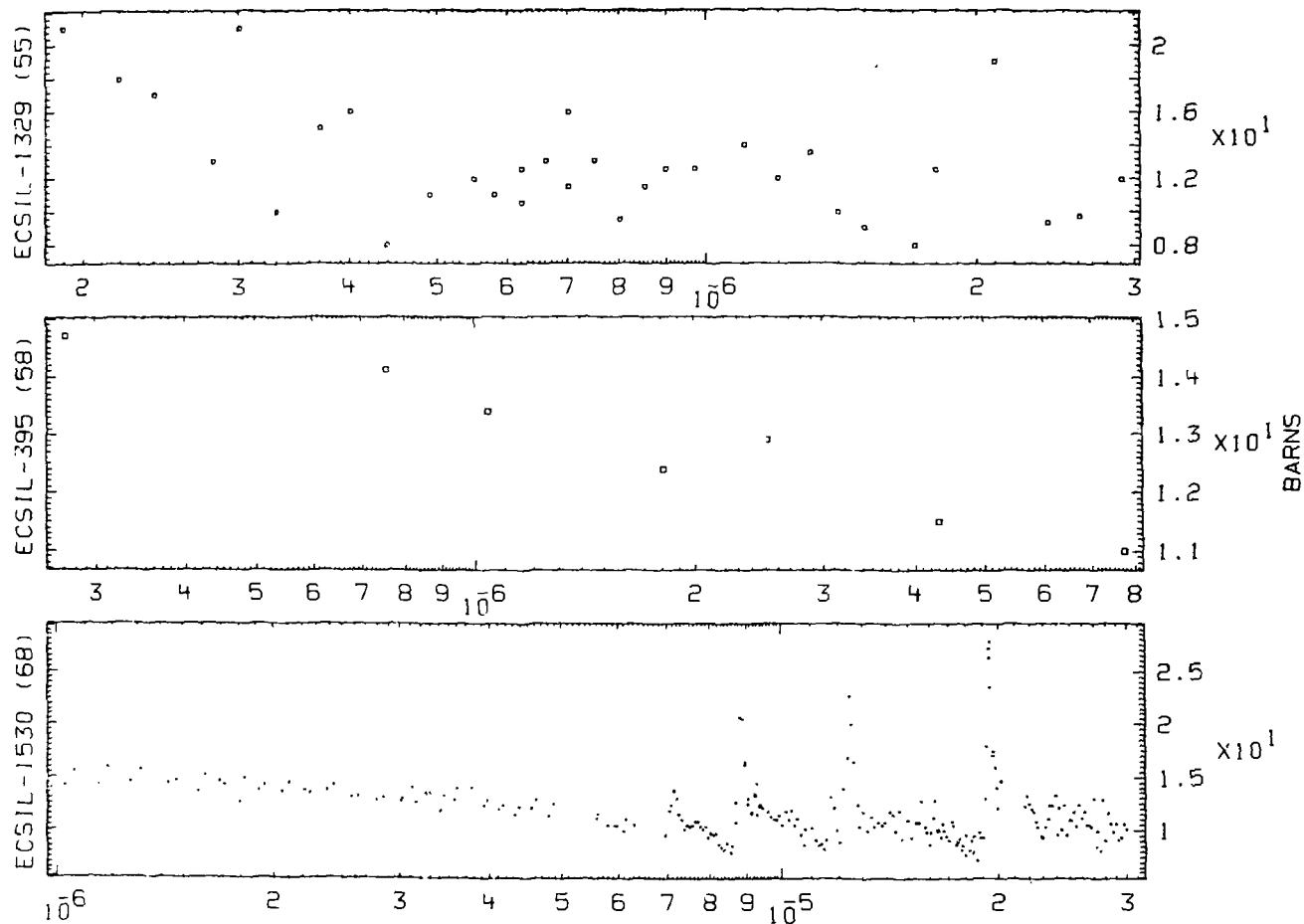
TOTAL CROSS SECTION



03/01/74

ELASTIC
CROSS SECTION

92-U -235



11-96

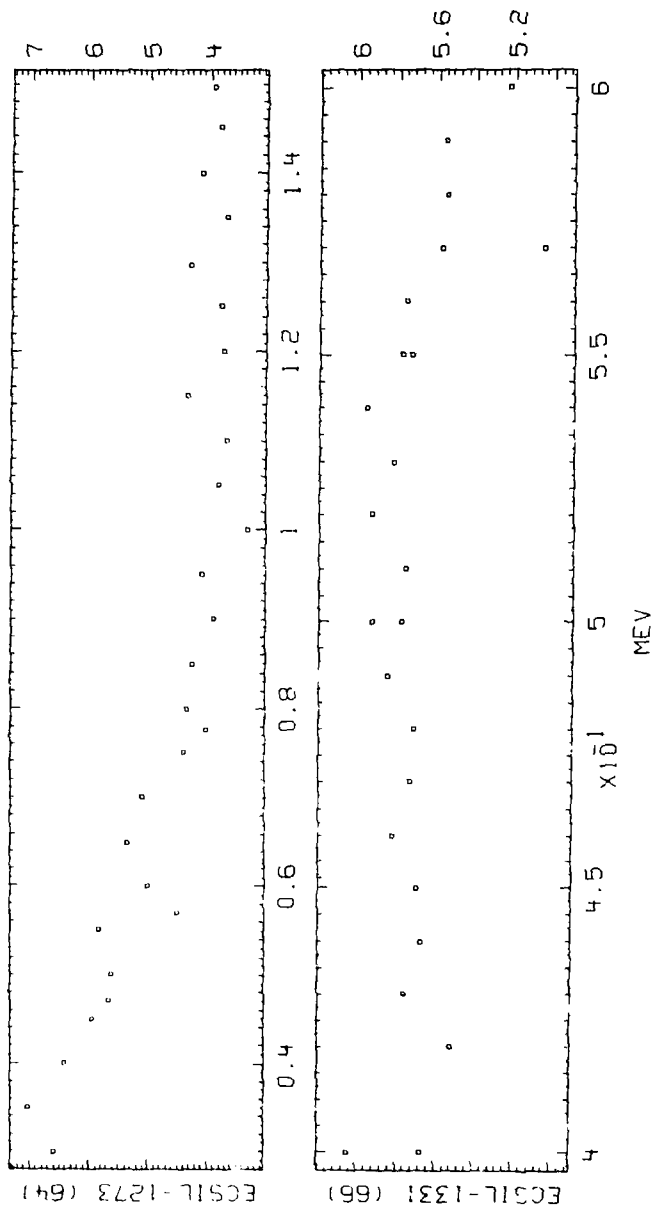
MEV

92-U -235 -15

03/01/74

ELASTIC CROSS SECTION

92-U -235

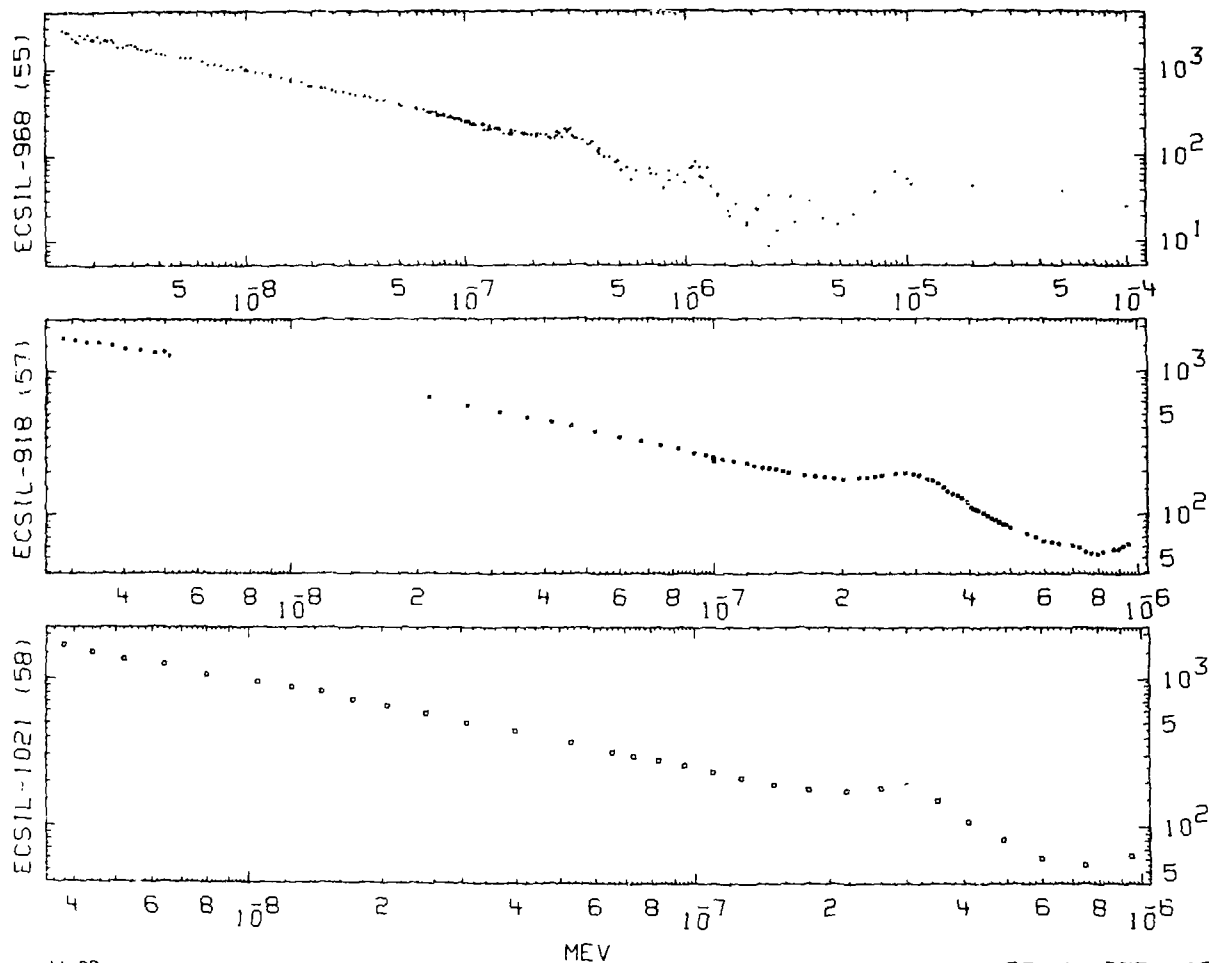


BARNs

03/01/74

FISSION
CROSS SECTION

92-U -235



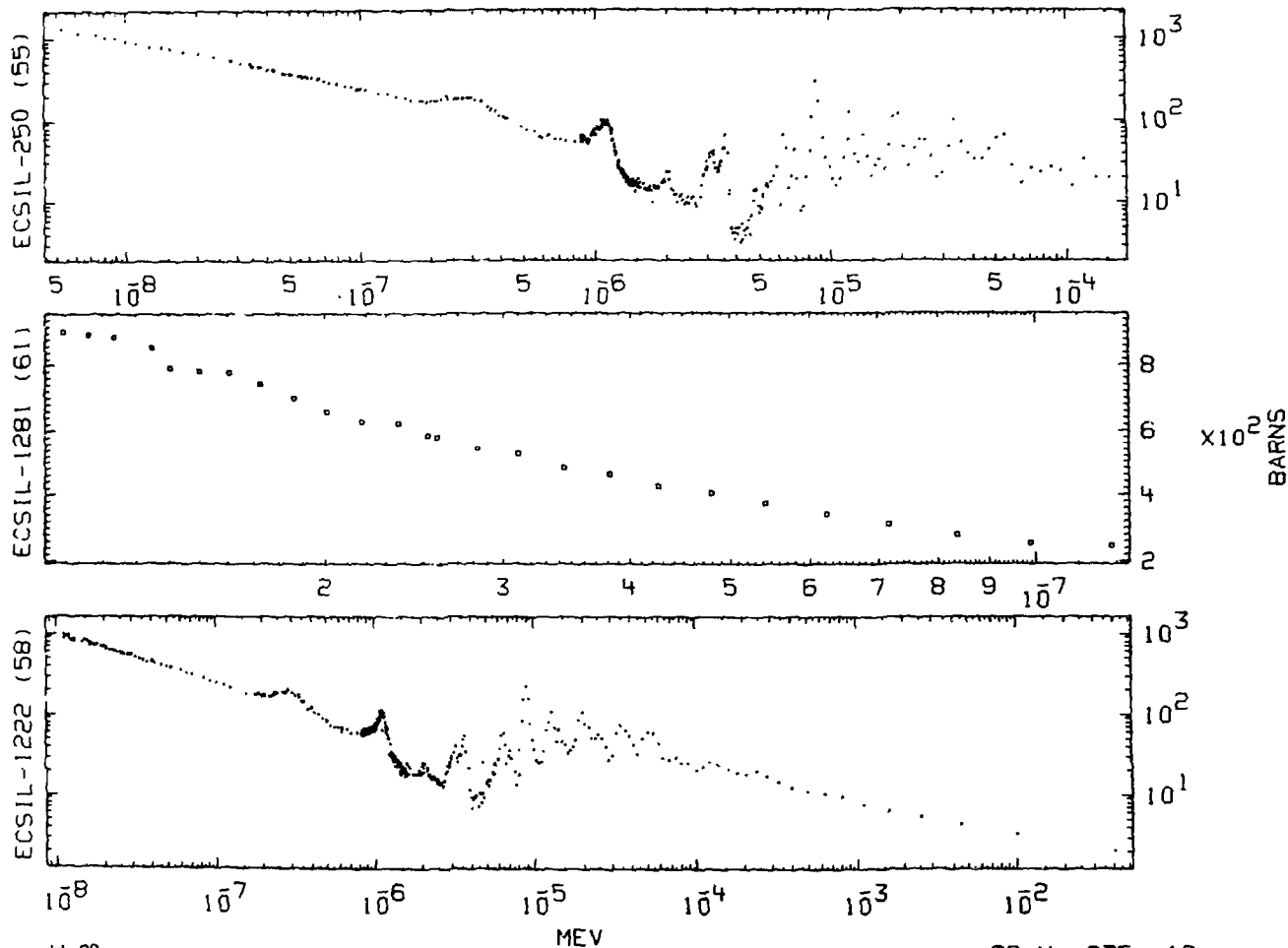
11-98

92-U -235 -17

03/01/74

FISSION CROSS SECTION

92-U -235



11-99

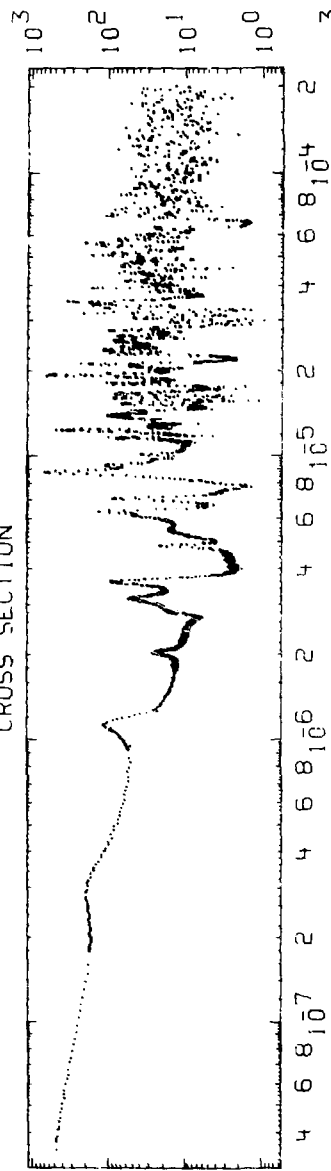
92-U -235 -18

03/01/74

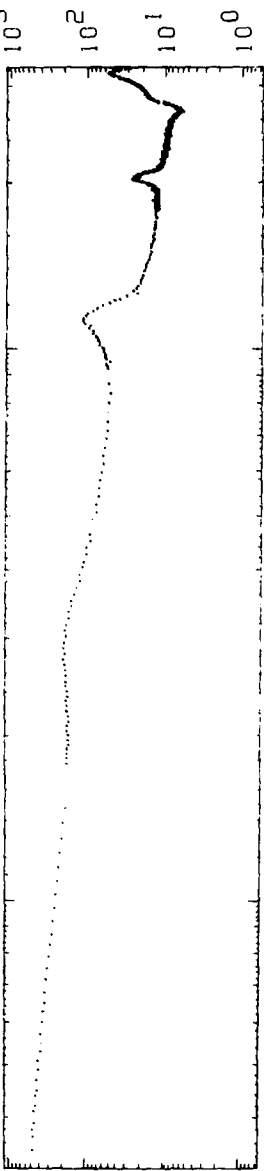
92-U -235

FISSION CROSS SECTION

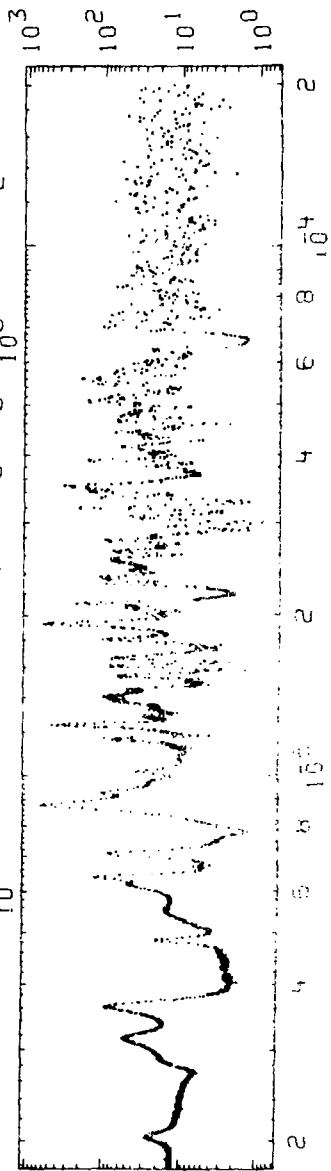
(EXPANDED BELOW)
ECSIL-1011 (65)



ECSIL-1011 (65)



ECSIL-1011 (65)



MEV

11-101

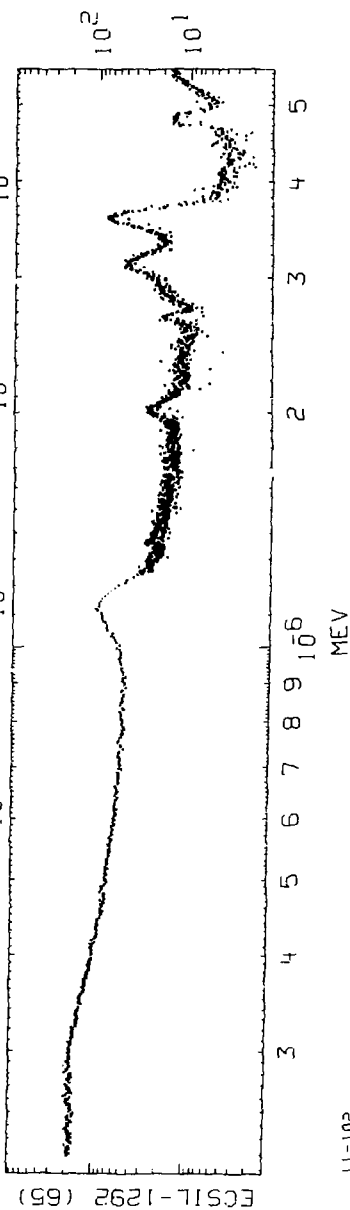
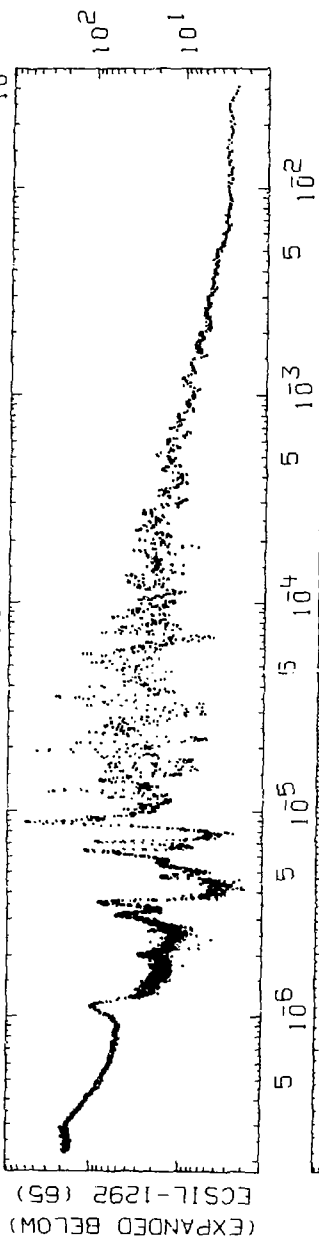
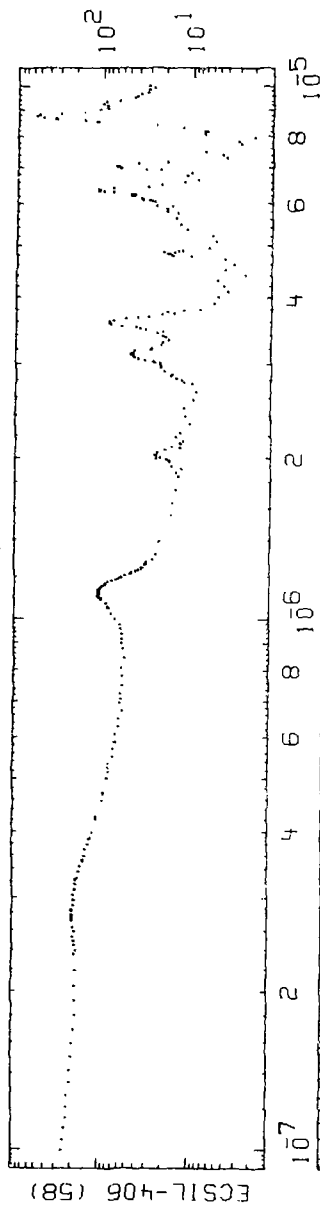
92-U -235 -20

BARNs

03/01/74

FISSION CROSS SECTION

92-U -235



11-102

MEV

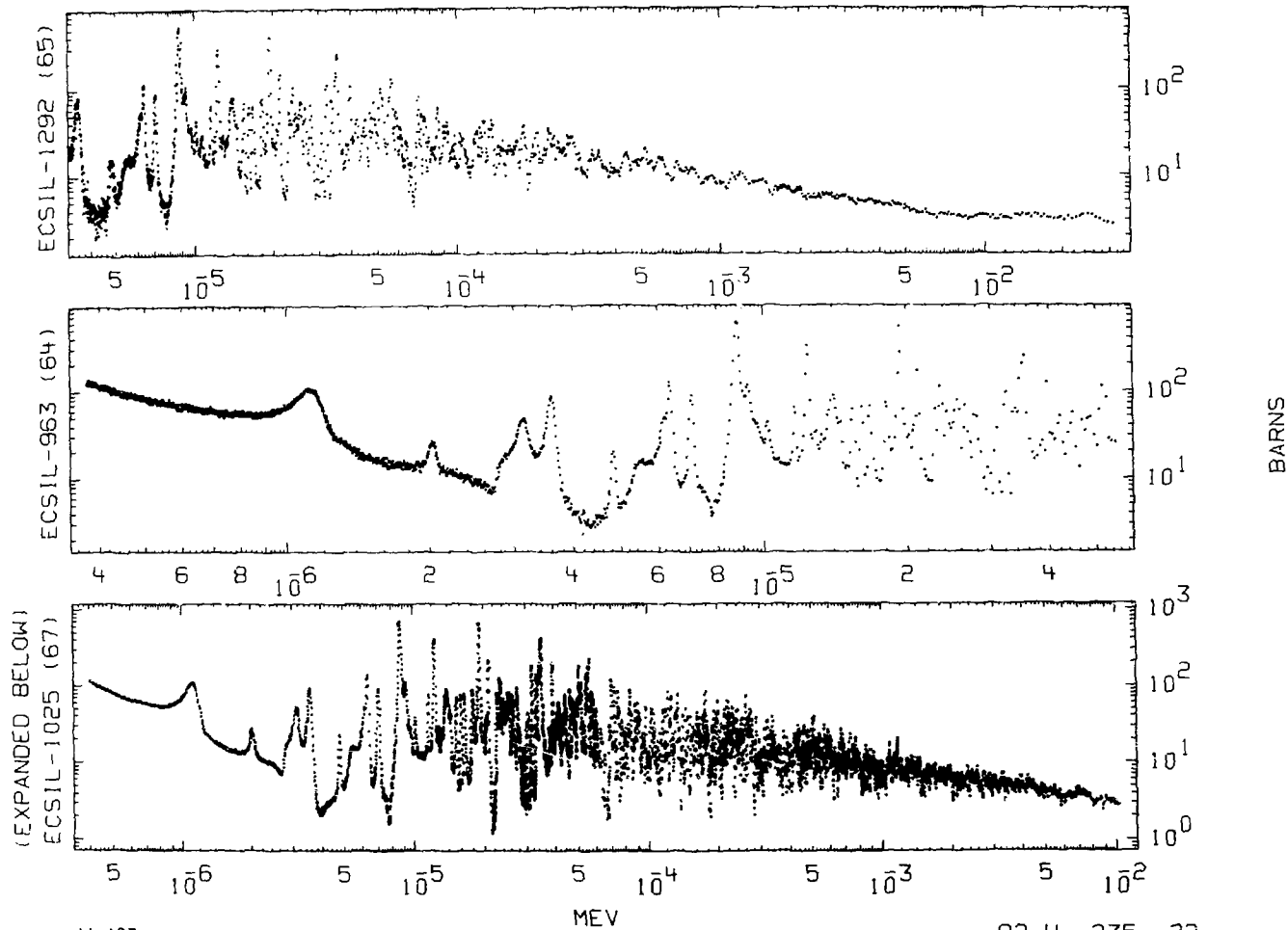
92-U -235 -21

BARNs

03/01/74

FISSION
CROSS SECTION

92-U -235



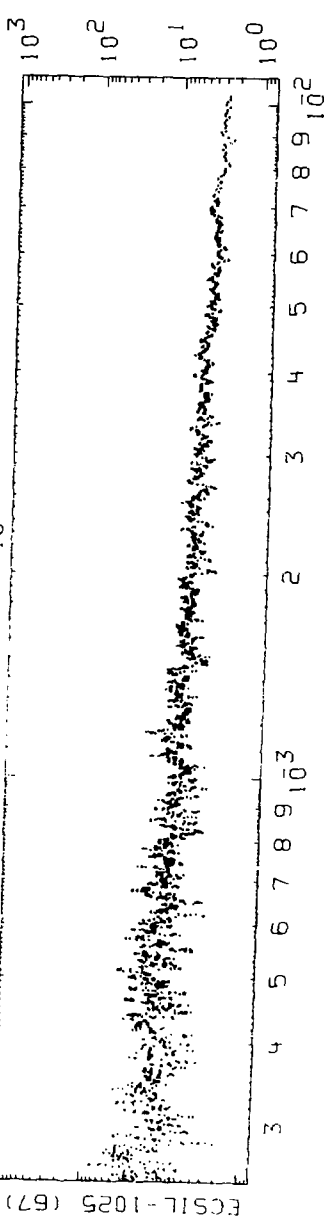
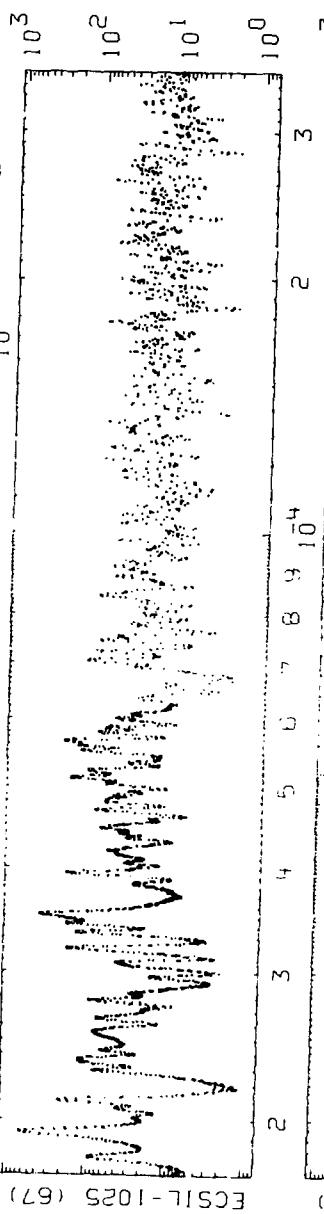
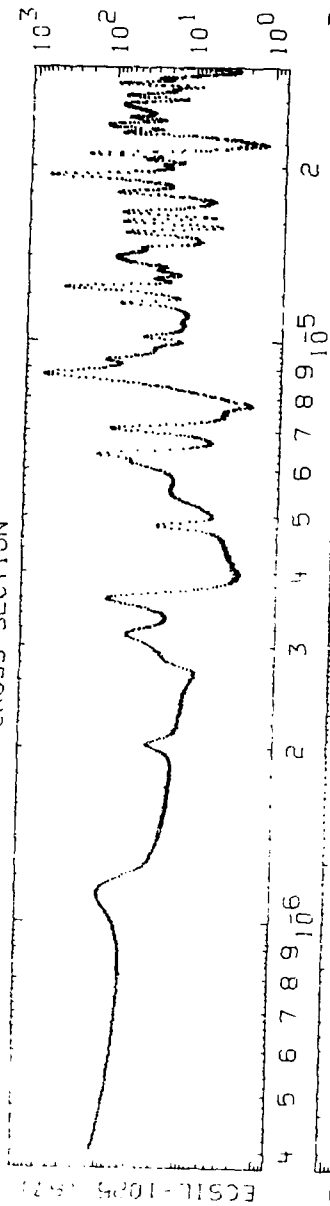
11-103

92-U -235 -22

037000

FISSION CROSS SECTION

92-U -235



11-104

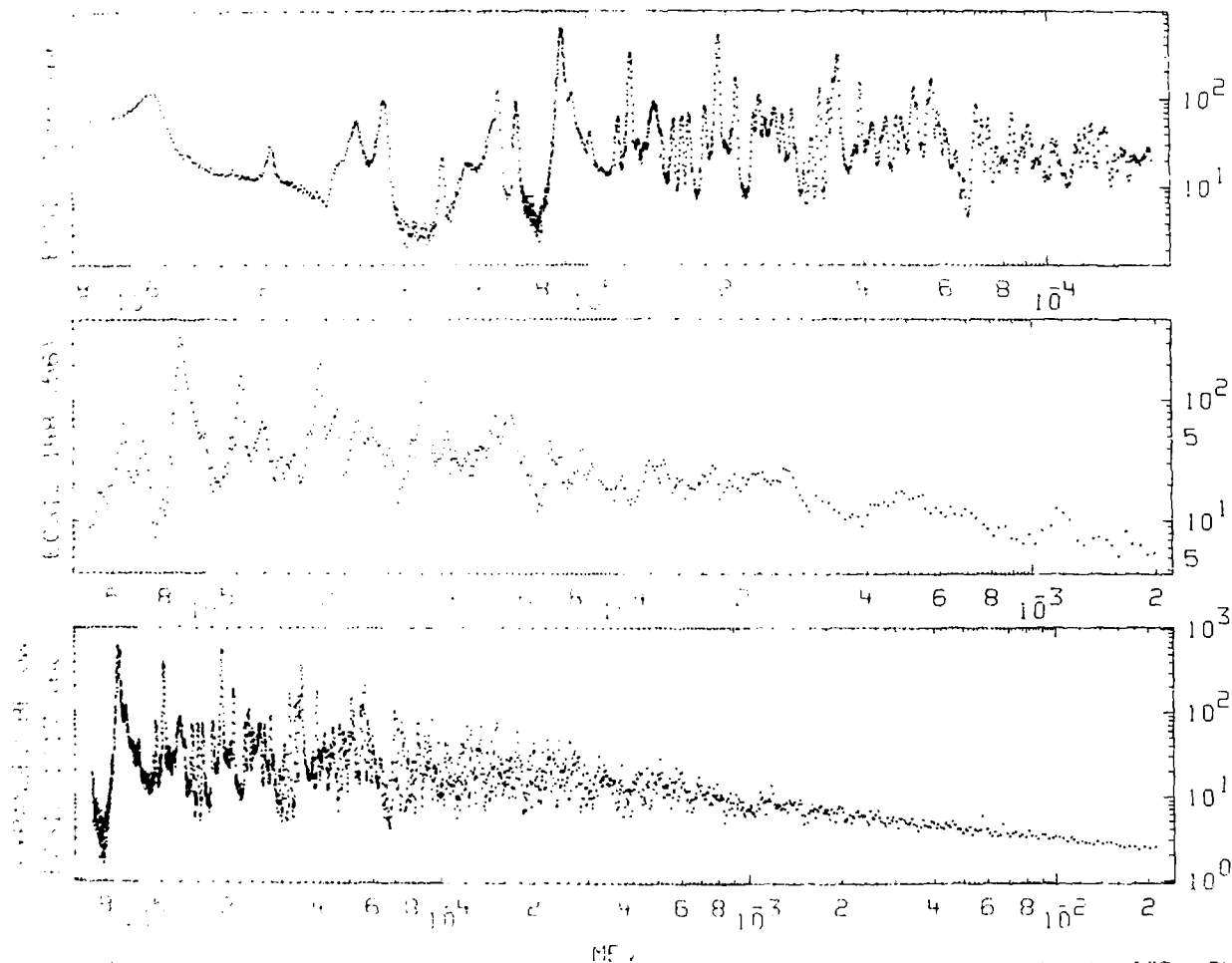
MEV

92-U -235 -23

BARNs

FISSION CROSS SECTION

92-U -235

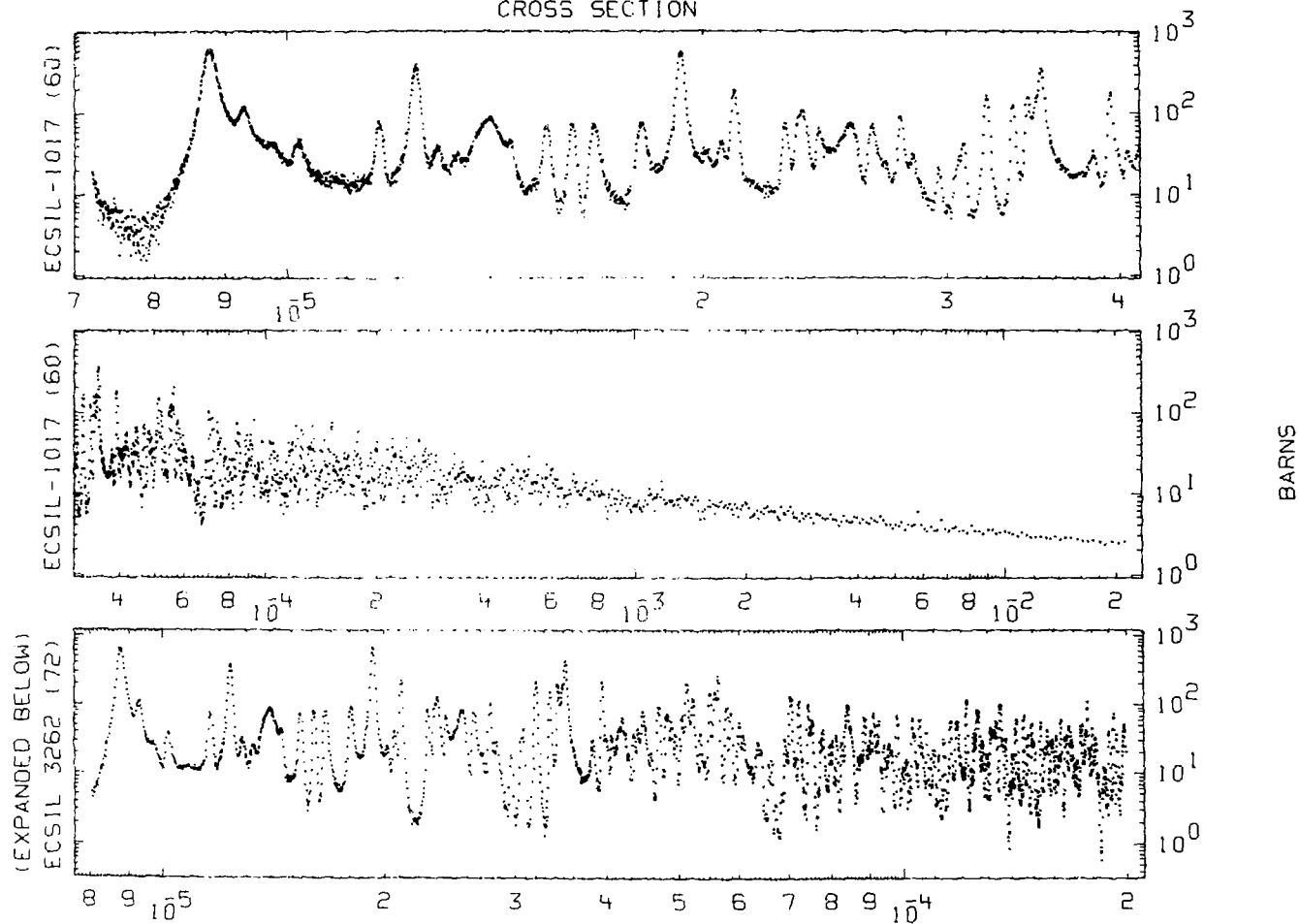


BARN

03/01/74

FISSION
CROSS SECTION

92-U -235



11-106

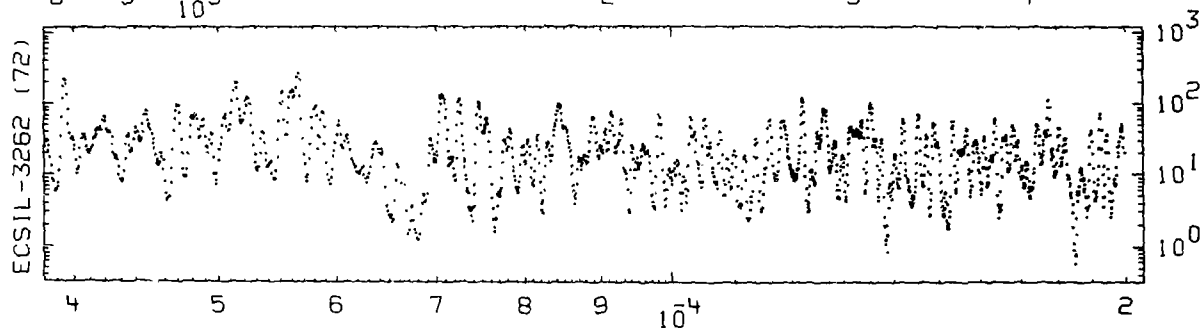
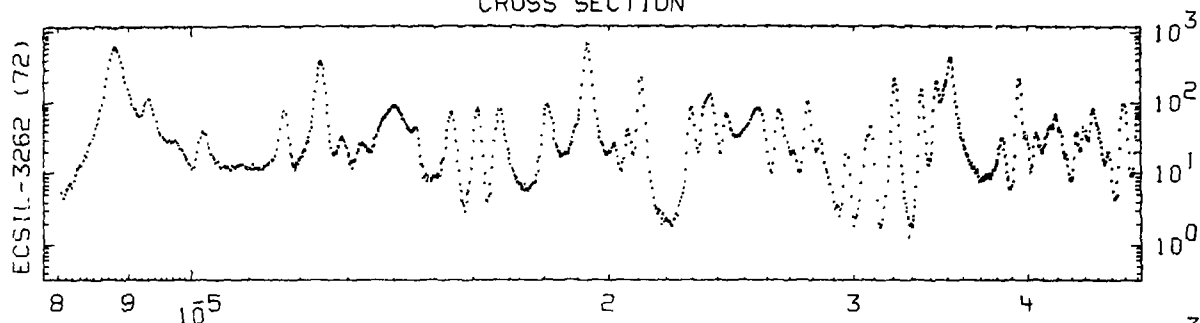
MEV

92-U -235 -25

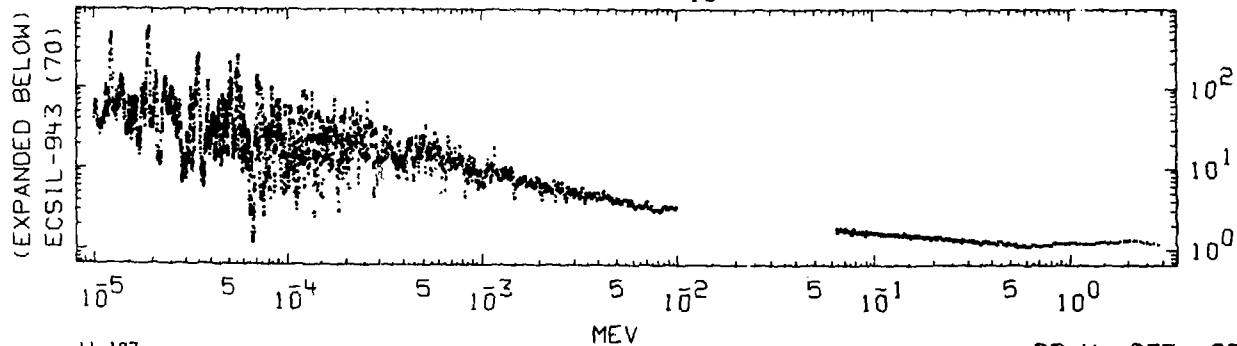
03/01/74

FISSION
CROSS SECTION

92-U -235



BARNs



11-107

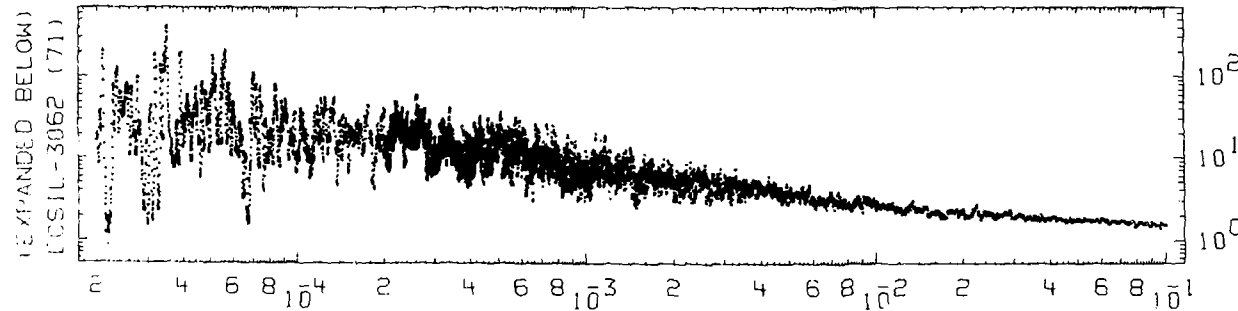
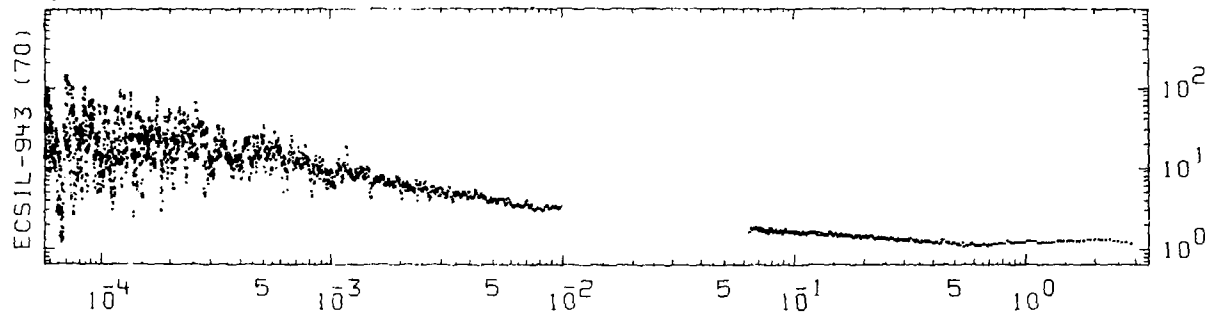
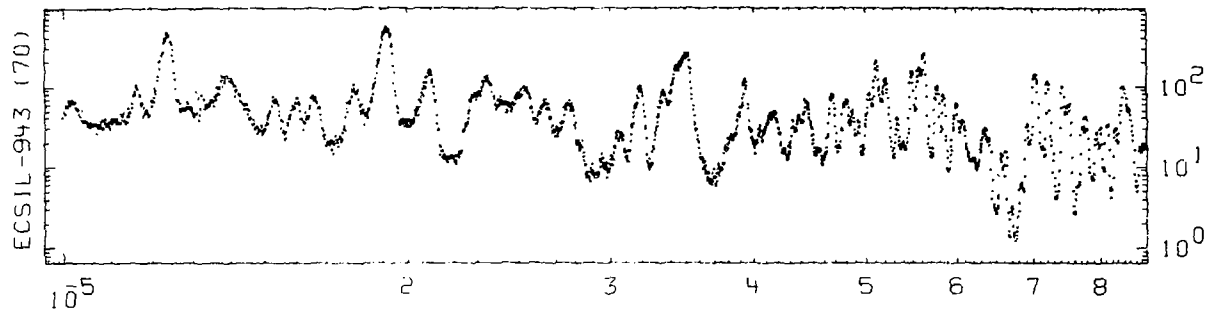
MEV

92-U -235 -26

03/01/74

FISSION
CROSS SECTION

92-U -235



11-103

MEV

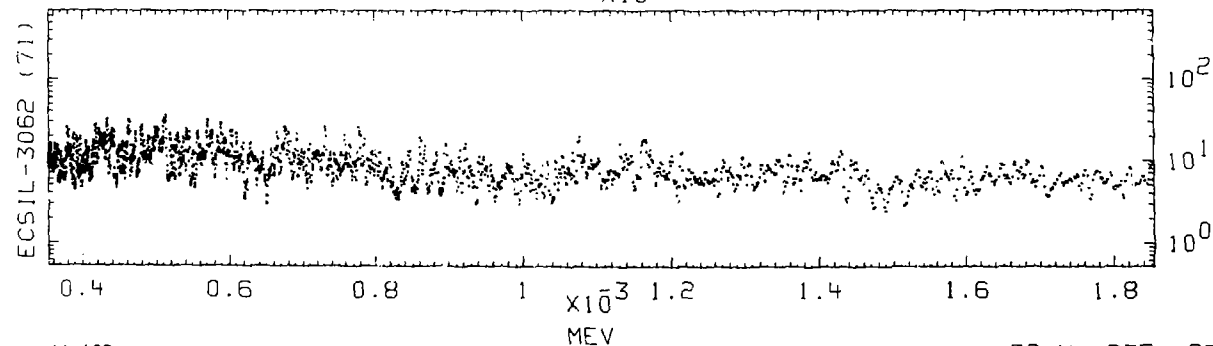
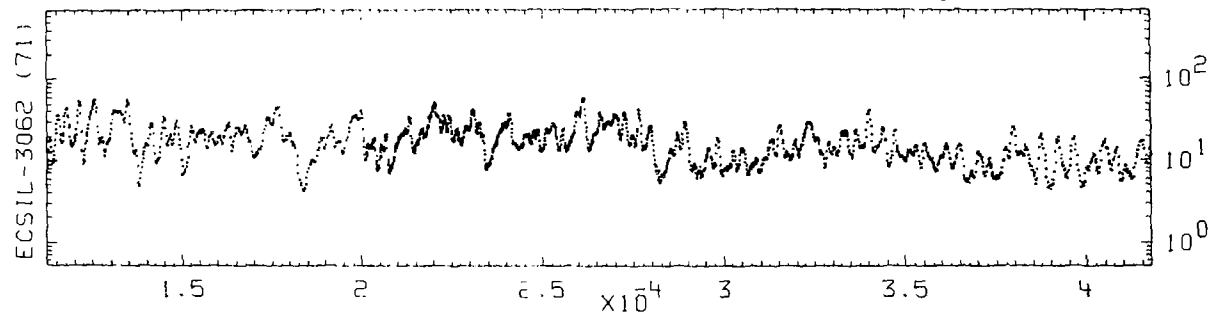
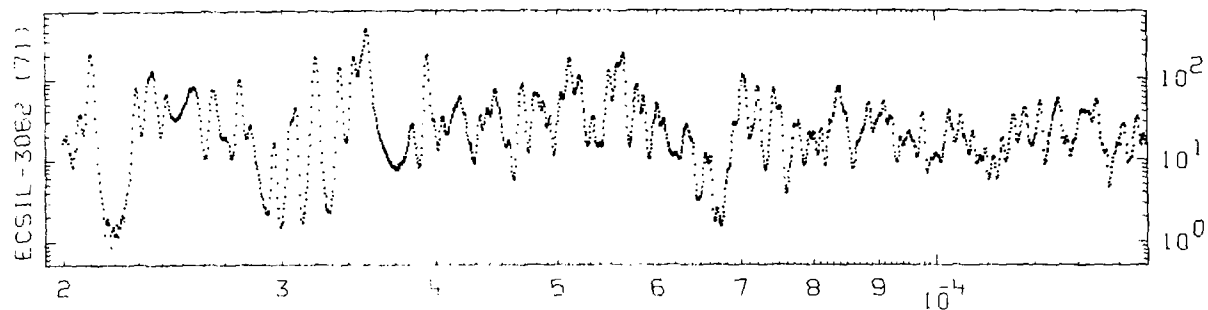
92-U -235 -27

BARN

03/01/74

FISSION
CROSS SECTION

92-U -235



11-109

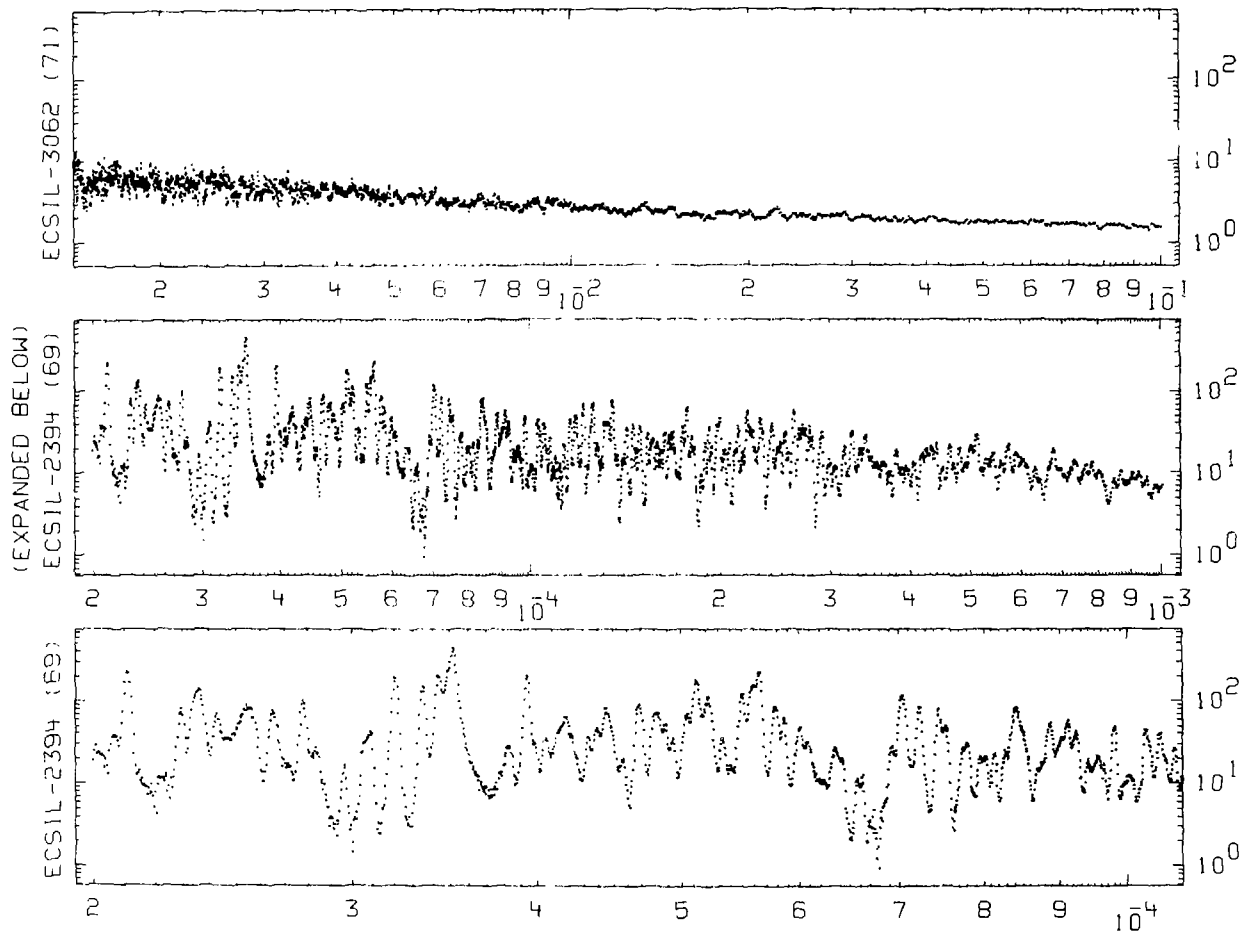
92-U -235 -28

BARNs

03/01/74

FISSION
CROSS SECTION

92-U -235



11-110

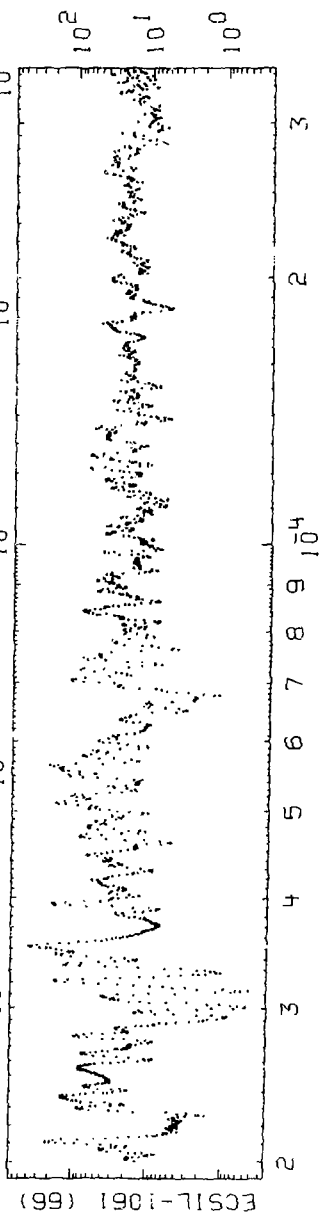
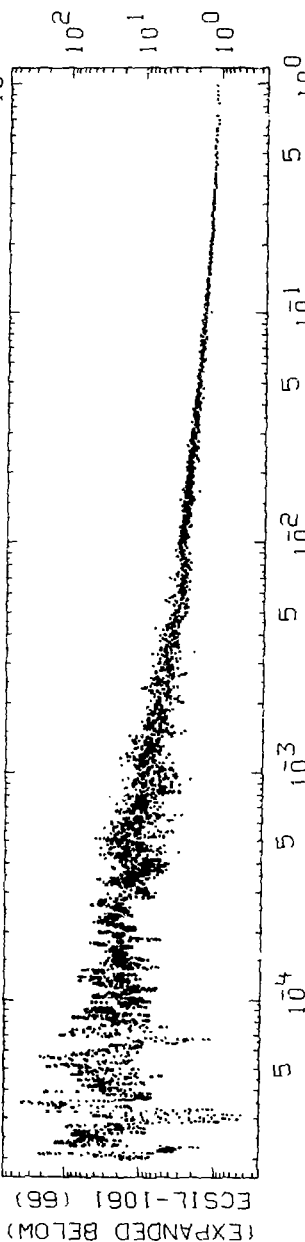
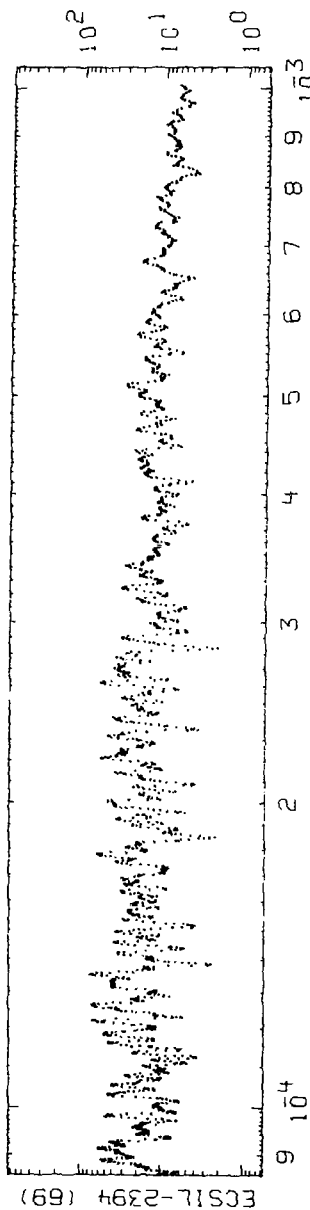
MEV

92-U -235 -29

03/01/74

FISSION
CROSS SECTION

92-U -235



MEV

11-111

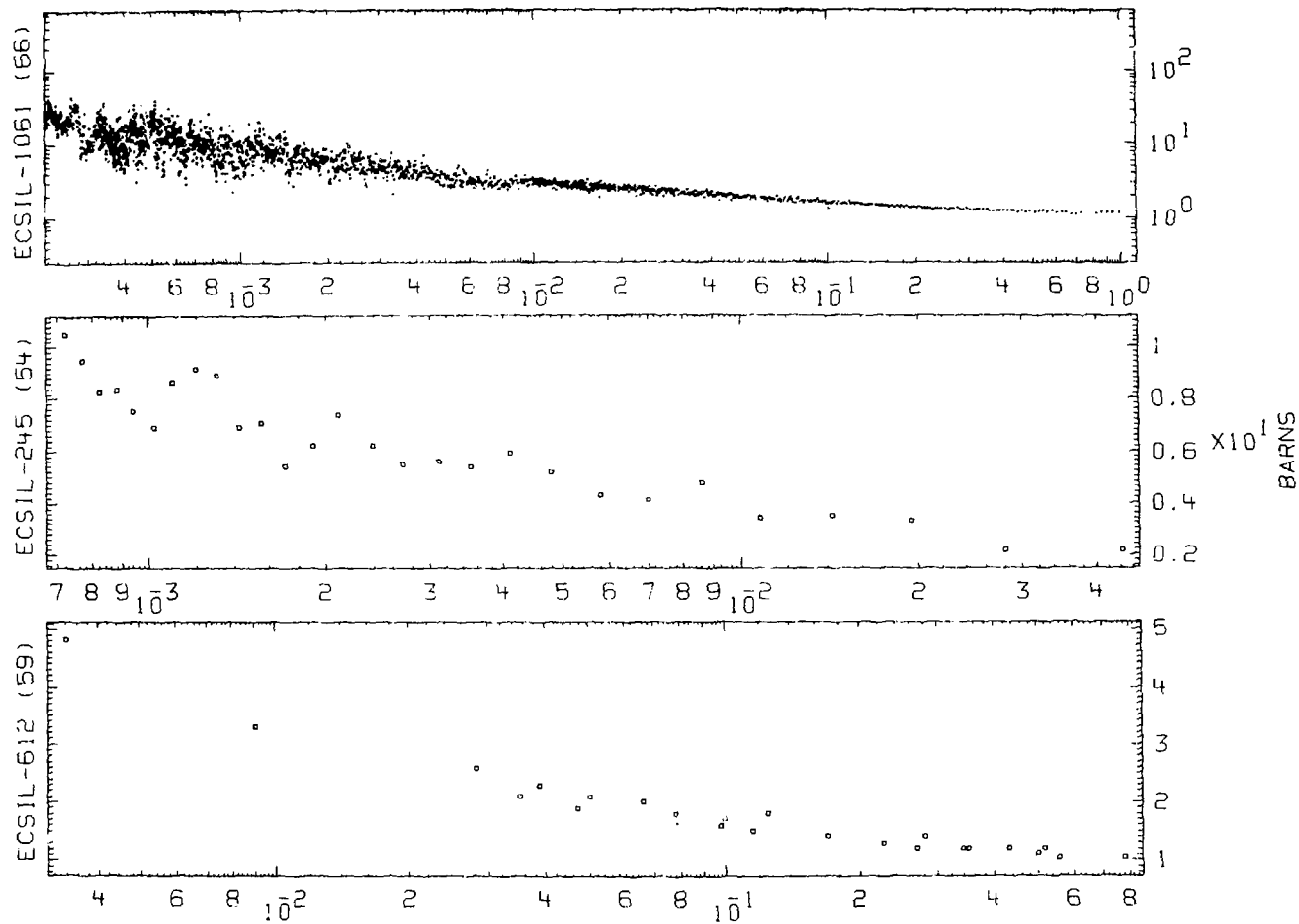
92-U -235 -30

BARNs

03/01/74

FISSION
CROSS SECTION

92-U -235



11-112

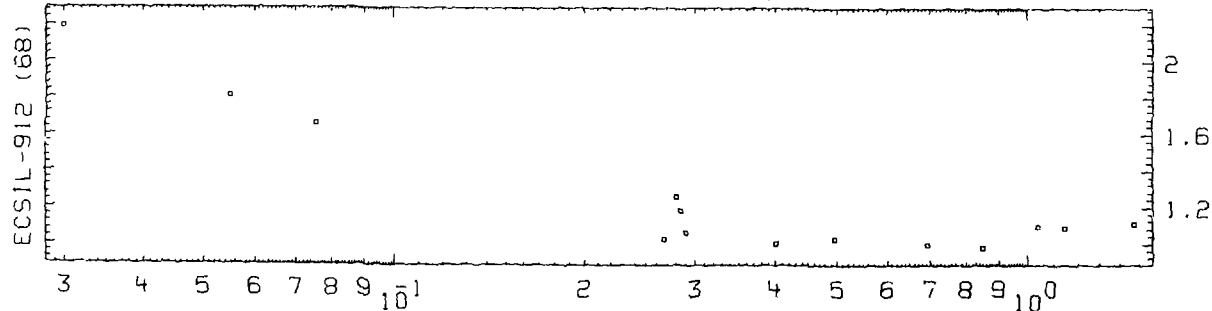
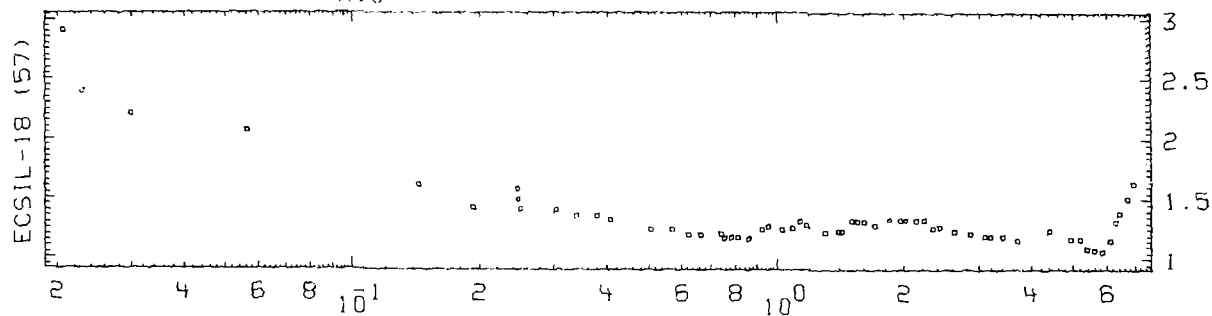
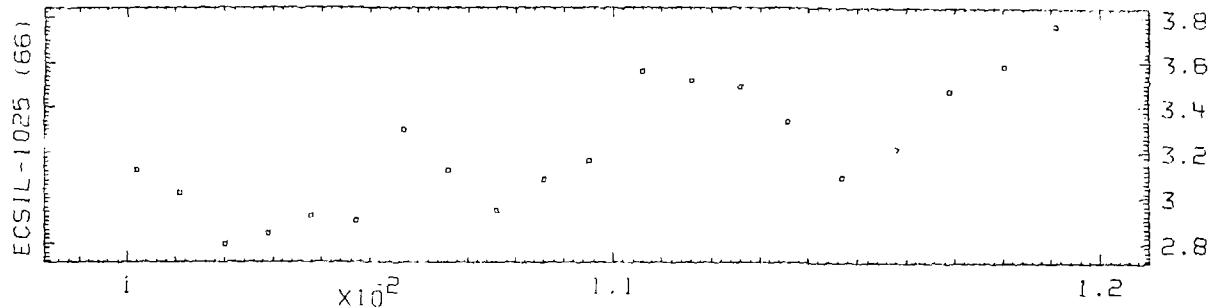
MEV

92-U -235 -31

03/01/74

FISSION
CROSS SECTION

92-U -235



11-113

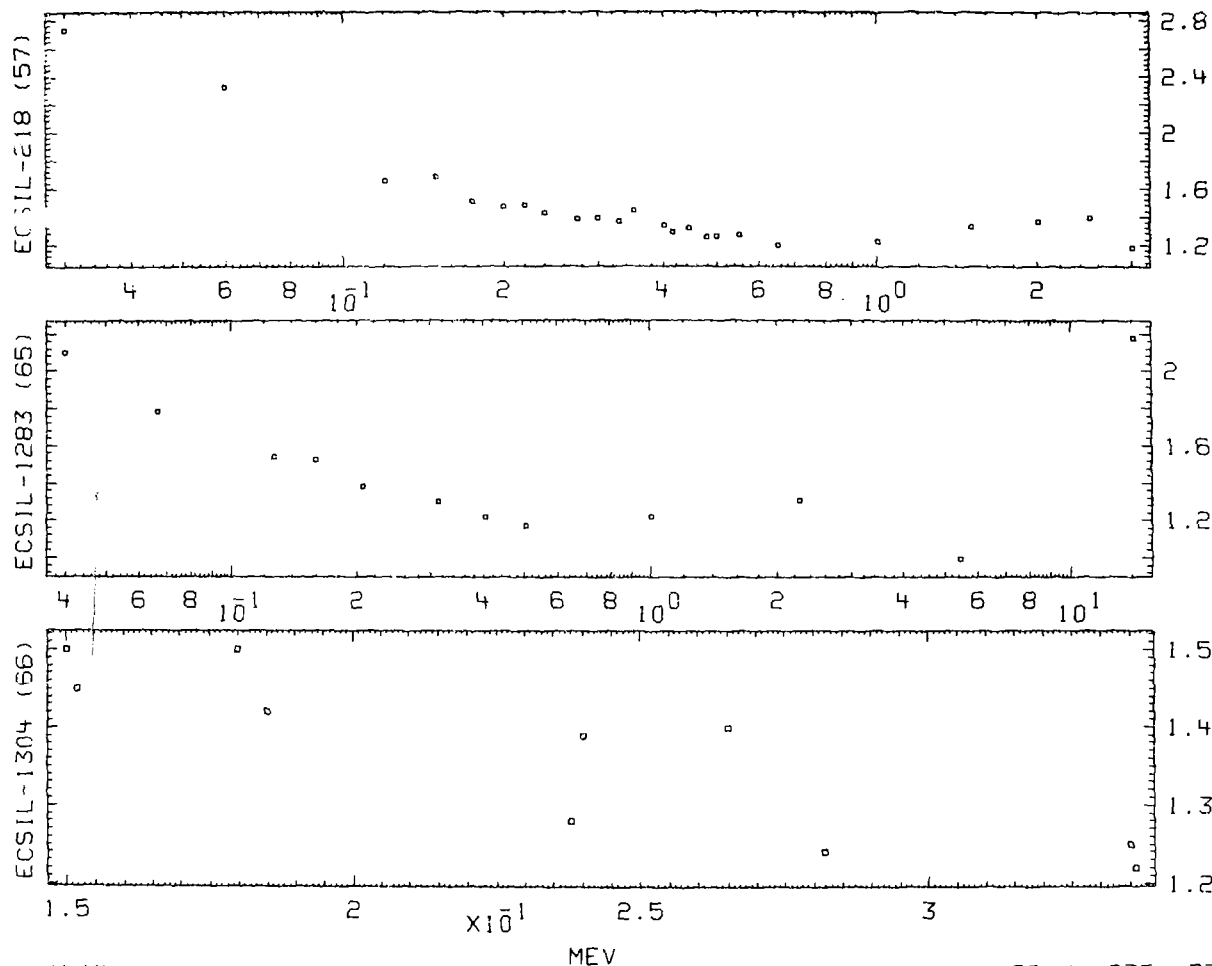
MEV

92-U -235 -32

03/01/74

FISSION
CROSS SECTION

92-U -235

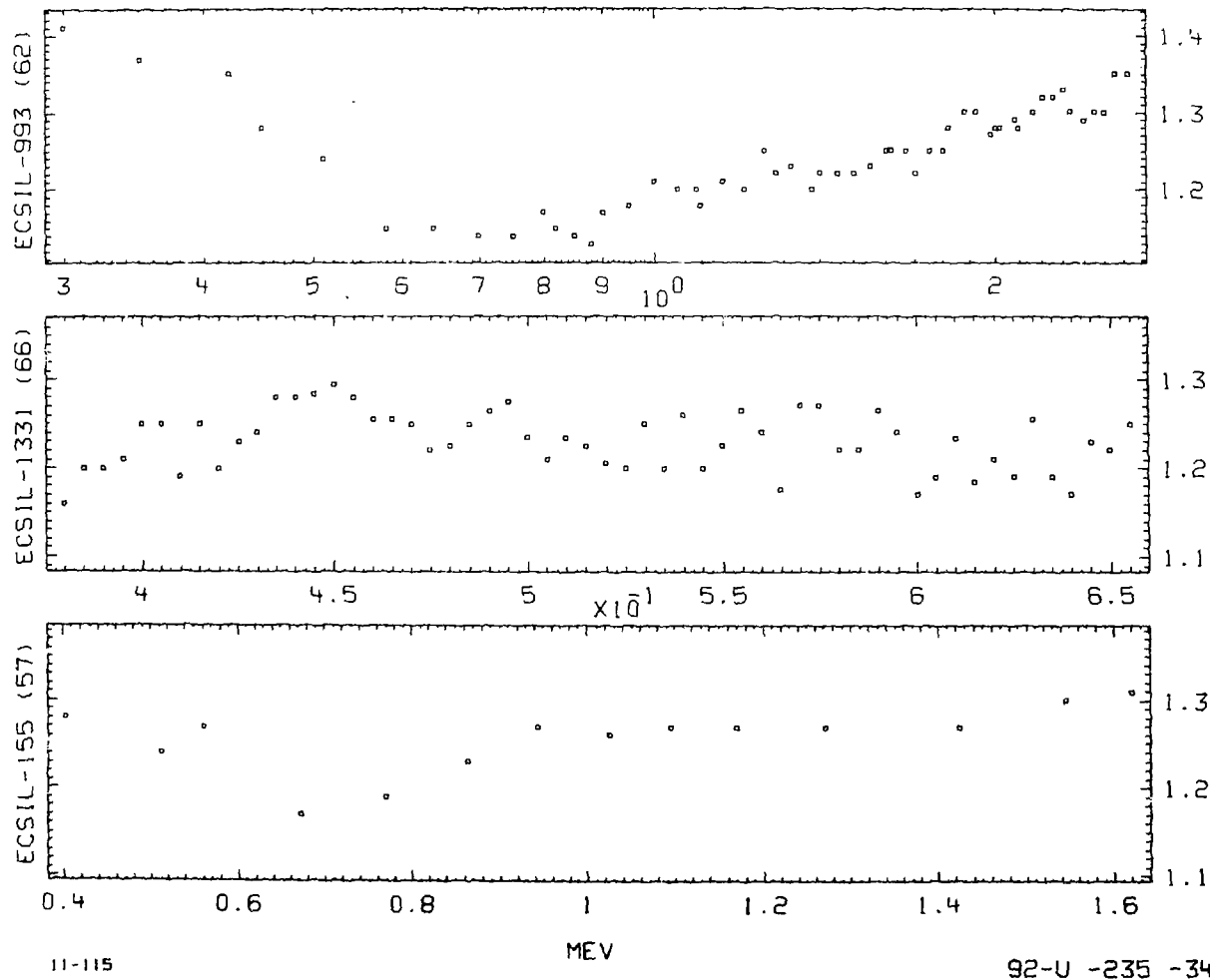


BARNs

03/01/74

FISSION
CROSS SECTION

92-U -235



BARNs

11-115

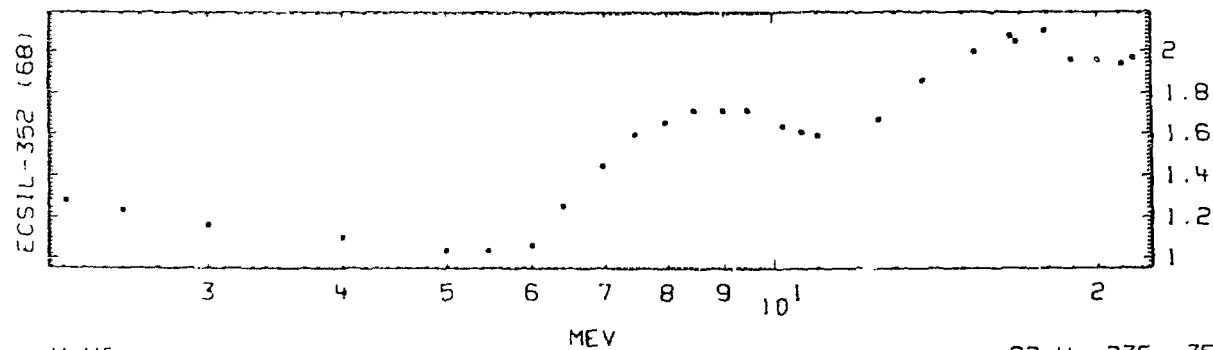
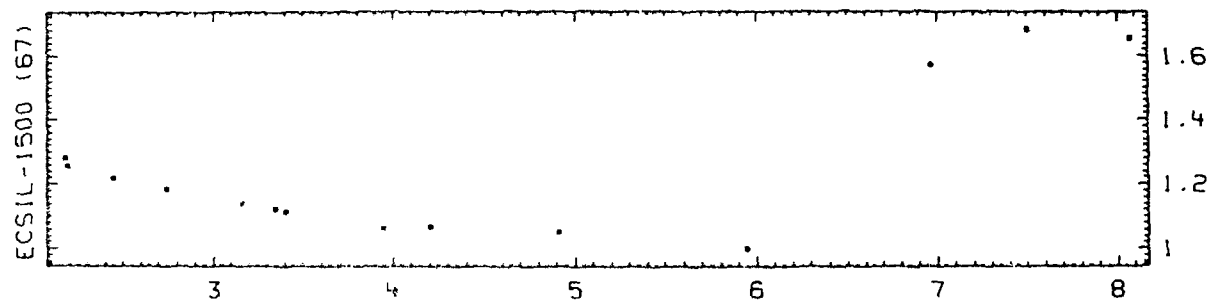
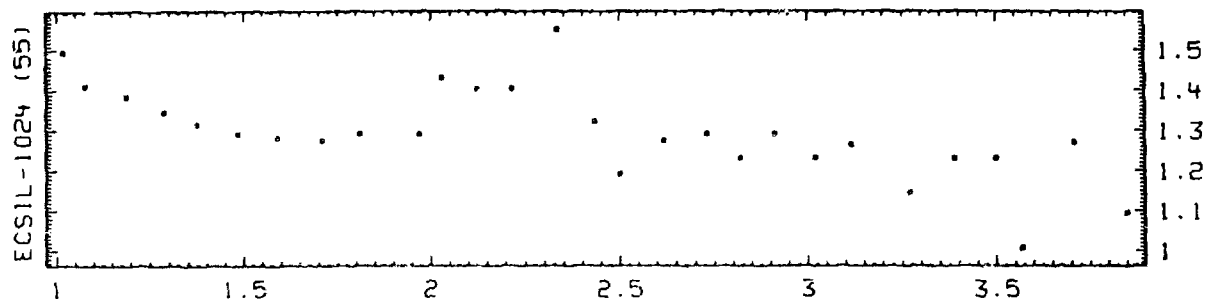
MEV

92-U -235 -34

03/01/74

FISSION
CROSS SECTION

92-U -235



11-116

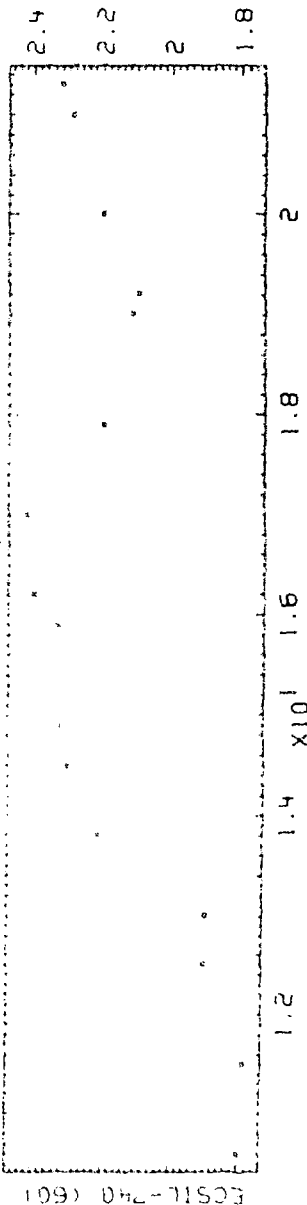
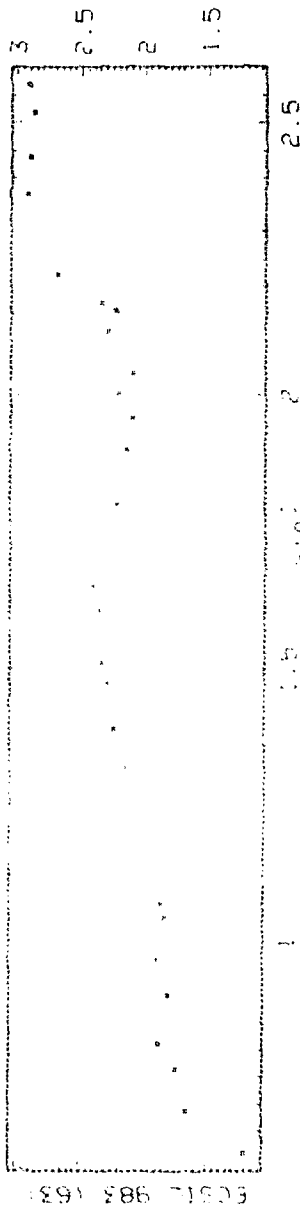
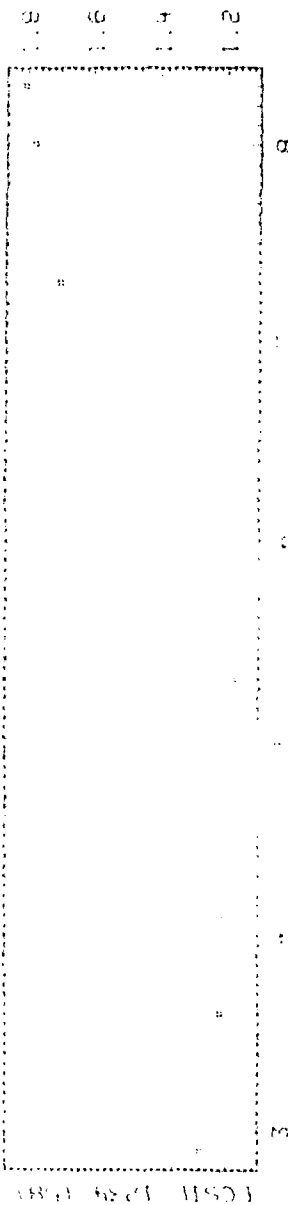
92-U -235 -35

92-U -36

FISSION

GROSS SECTION

92-U -36



BARN

11-117

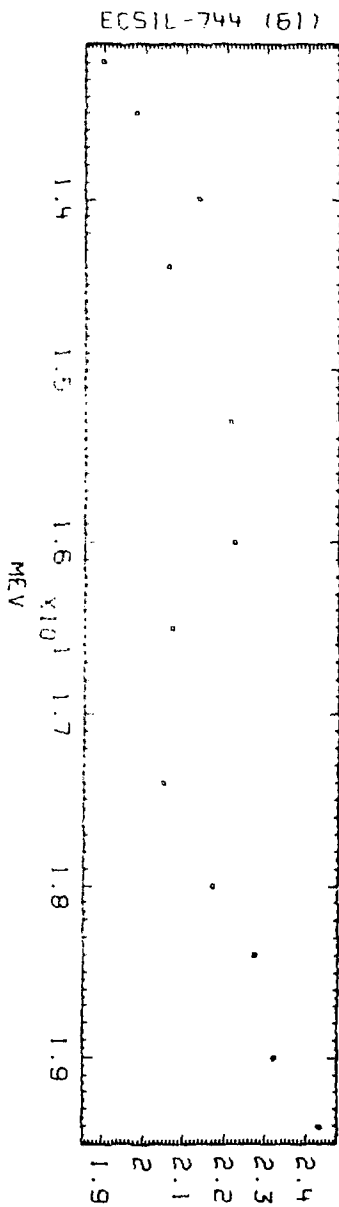
MEV

92-U -235 -36

03/01/74

FISSION CROSS SECTION

92-U -235

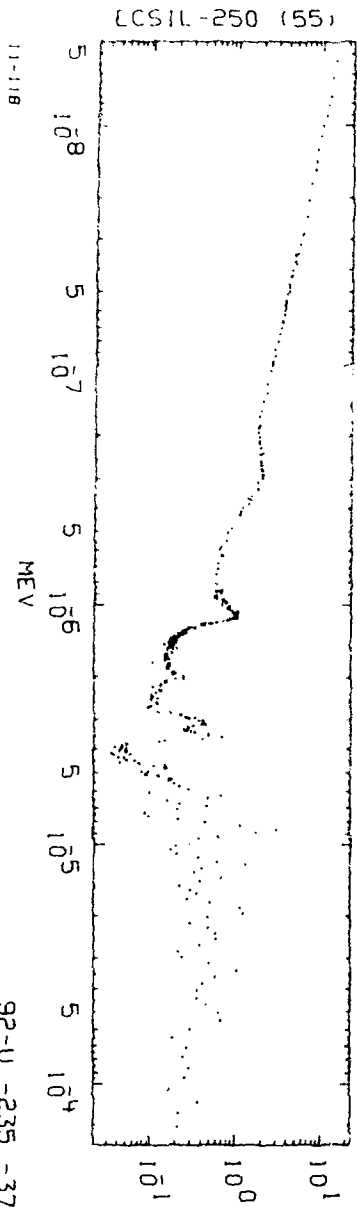


BARNs

03/01/74

FISSION CROSS SECTION

92-U -235

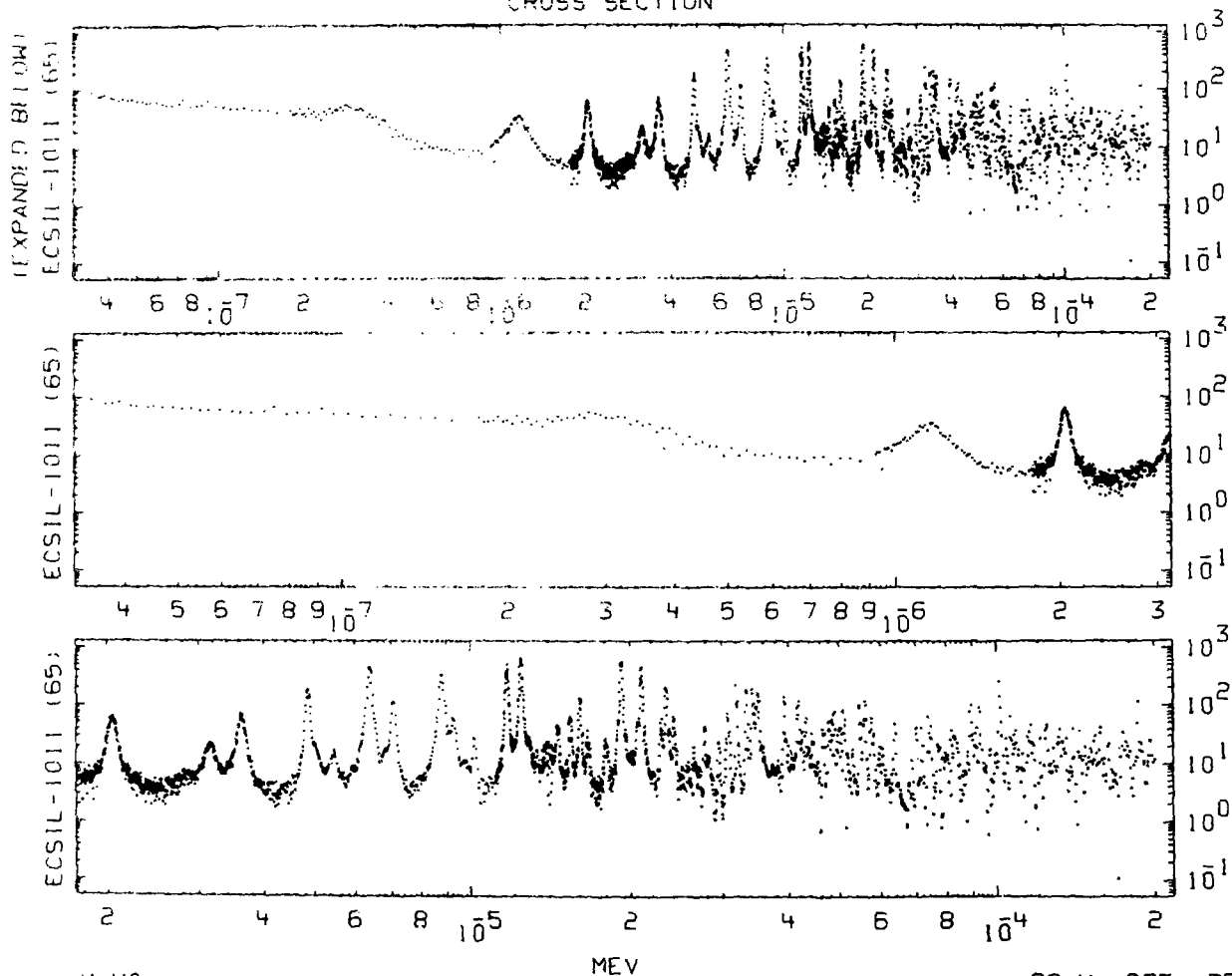


RELATIVE

03/01/74

N, GAMMA CROSS SECTION

92-U -235



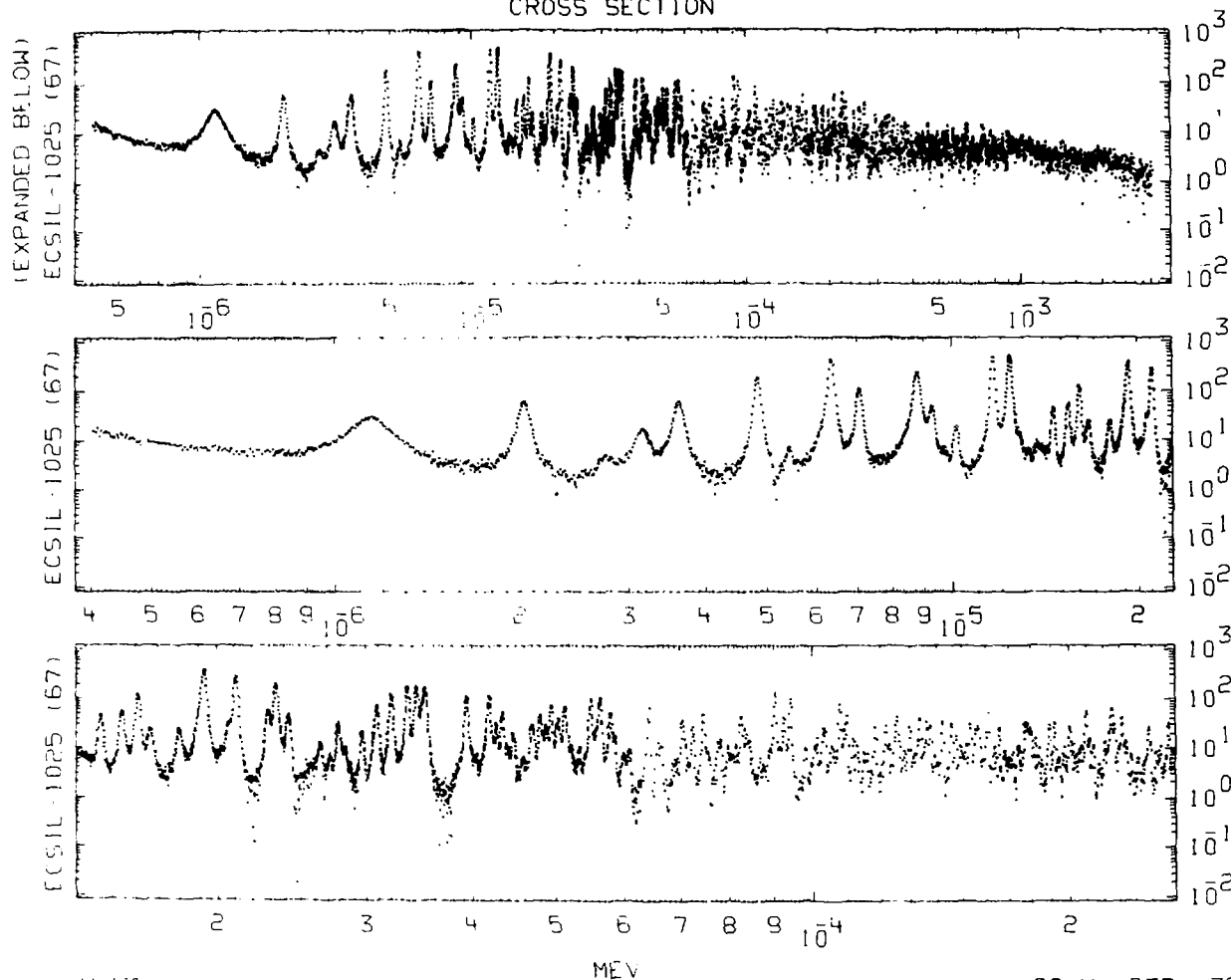
11-119

92-U -235 -38

03/01/74

N, GAMMA
CROSS SECTION

92-U -235



11-120

92-U -235 -39

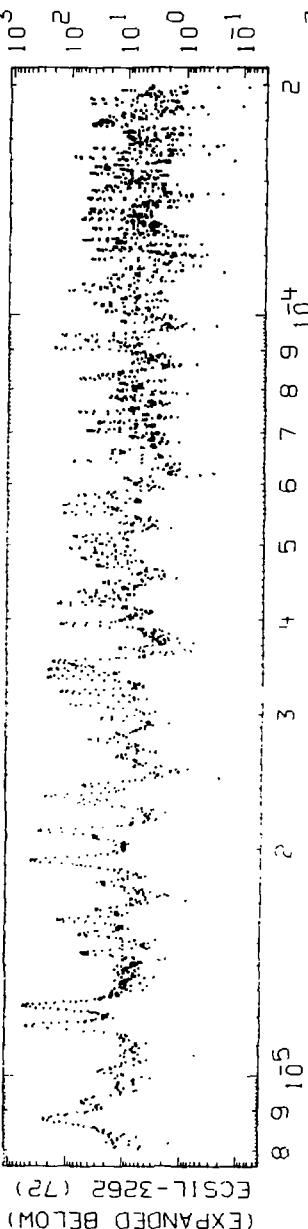
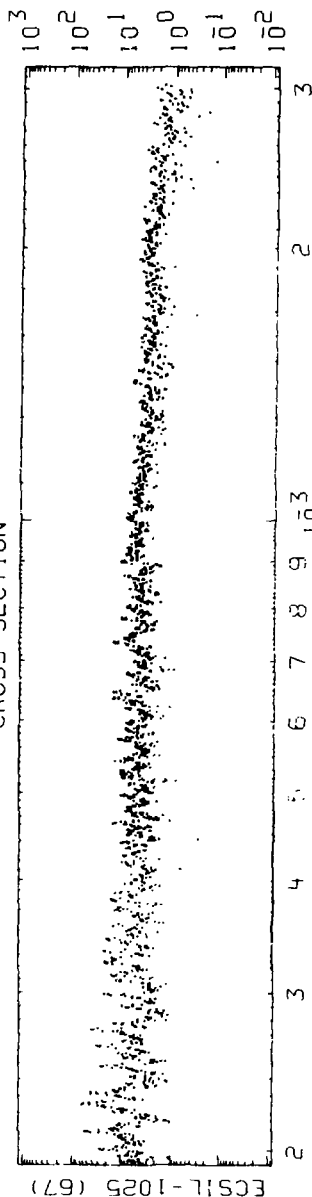
03/01/74

N. GAMMA

92-U -235

CROSS SECTION

BARNs



*1EV

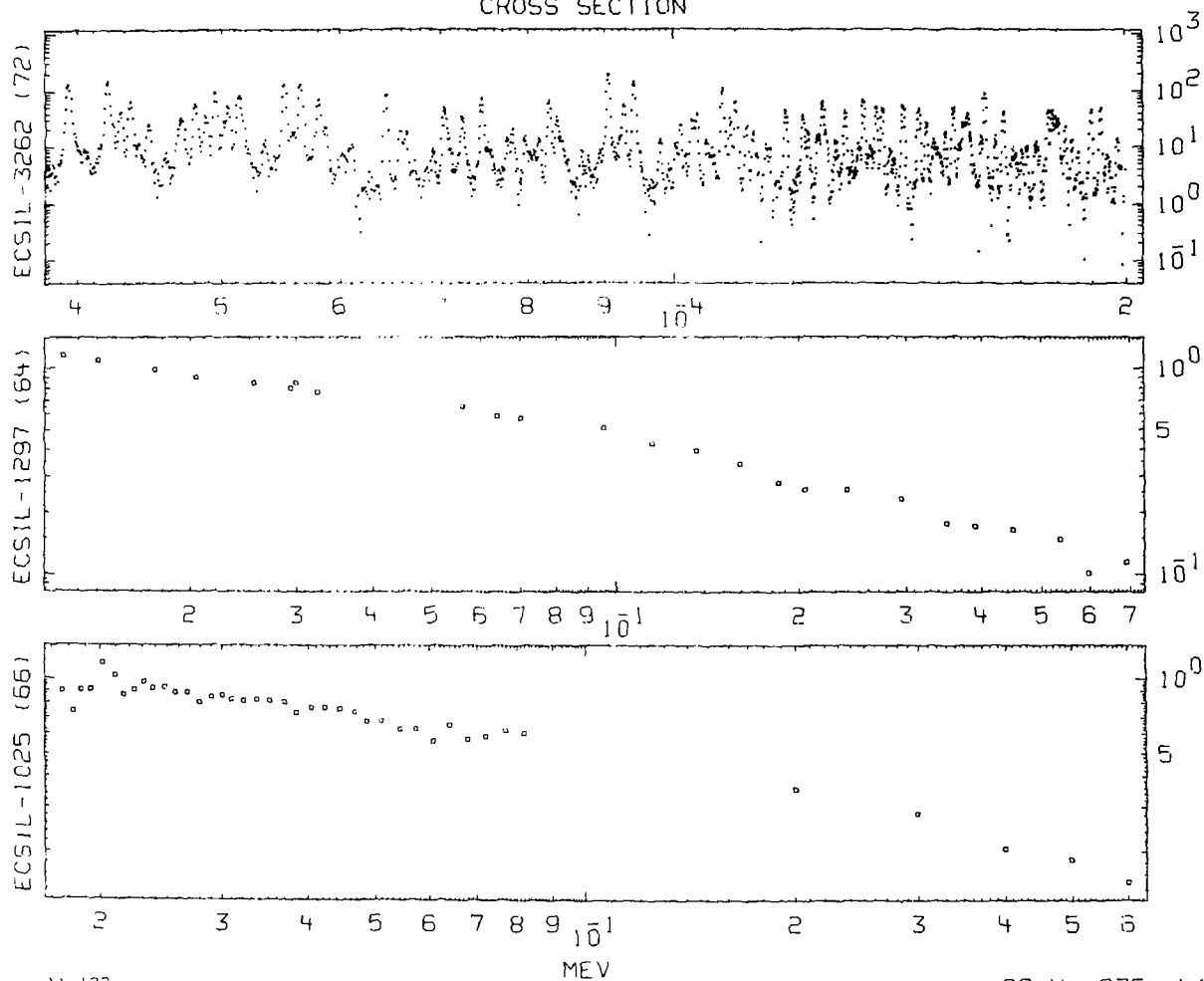
11-121

92-U -235 -40

03/01/74

N. GAMMA
CROSS SECTION

92-U -235



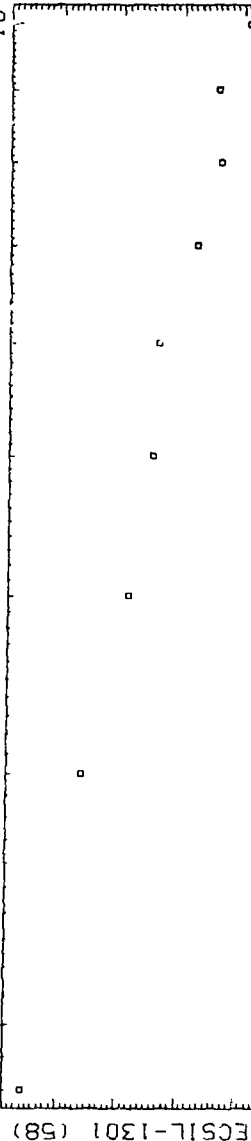
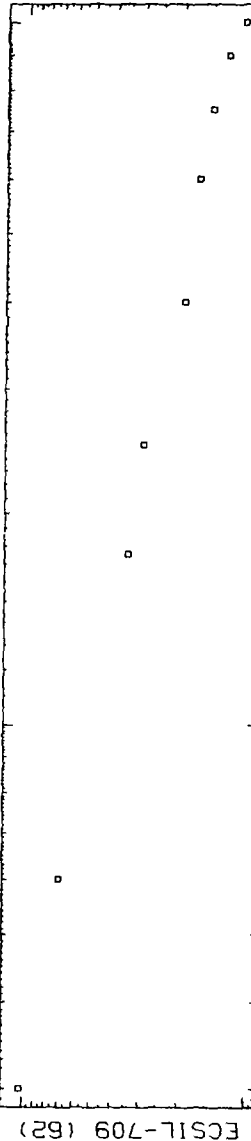
11-122

92-U -235 -41

03/01/74

N, GAMMA CROSS SECTION

92-U -235



BARNs

11-123

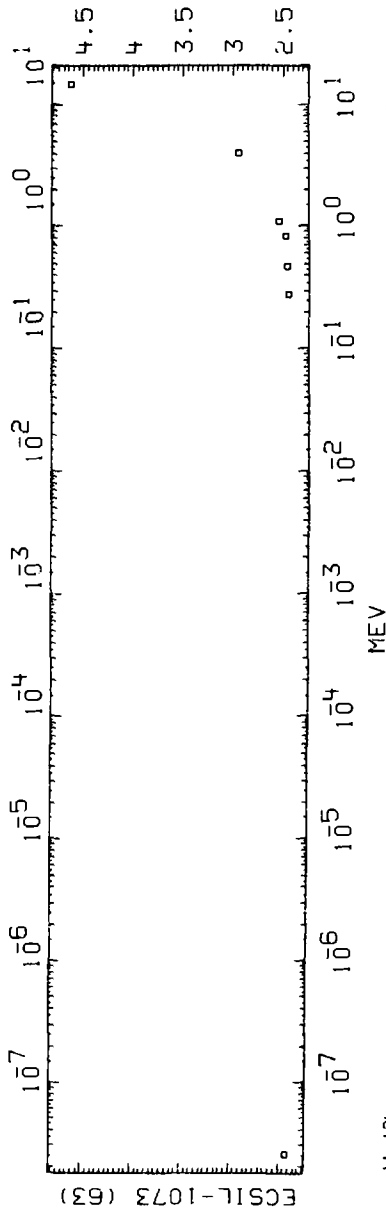
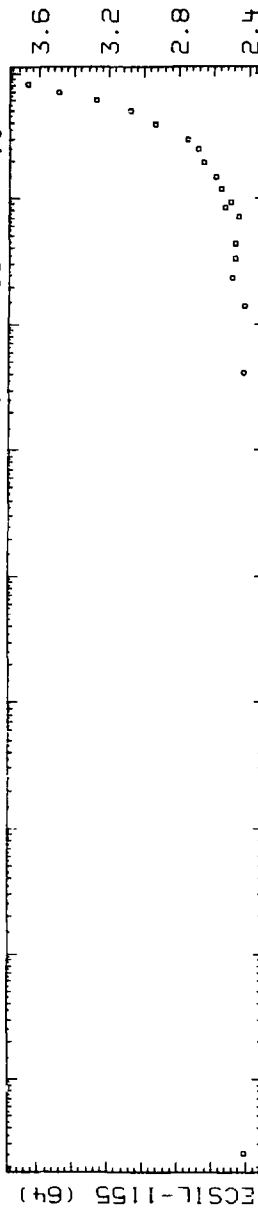
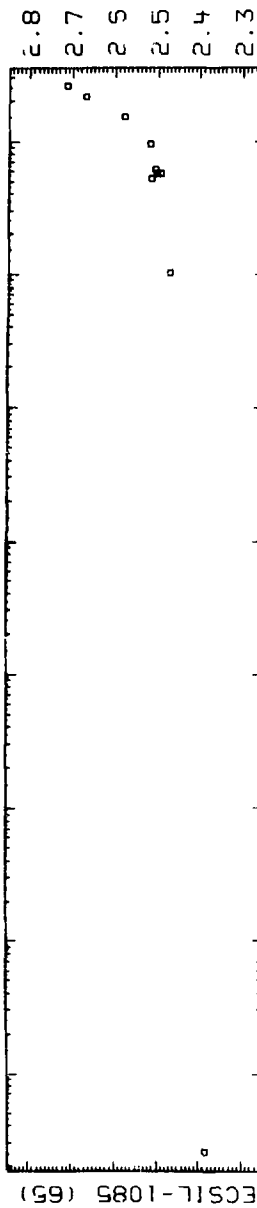
MEV

92-U -235 -42

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NEUTRONS/FISSION
PROMPT

92-U -235



11-124

92-U -235 -43

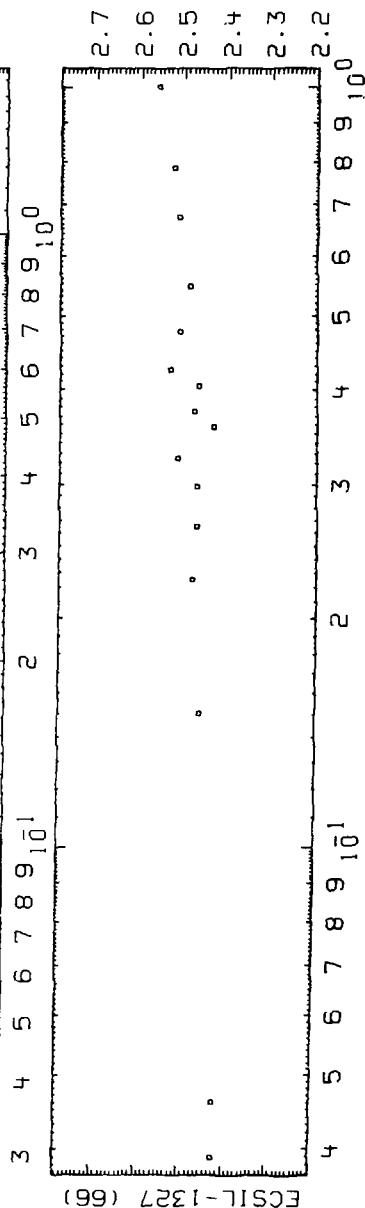
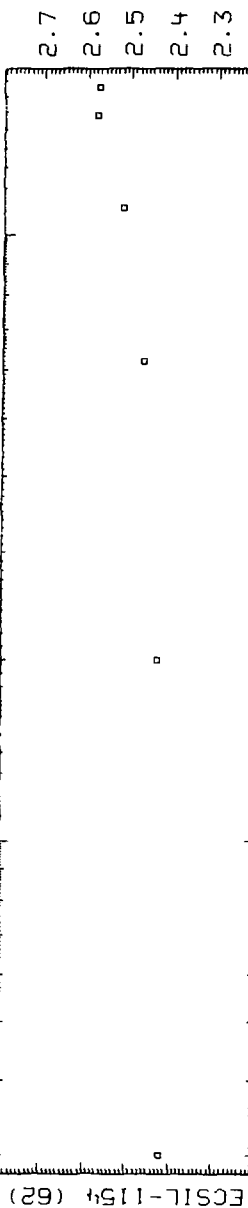
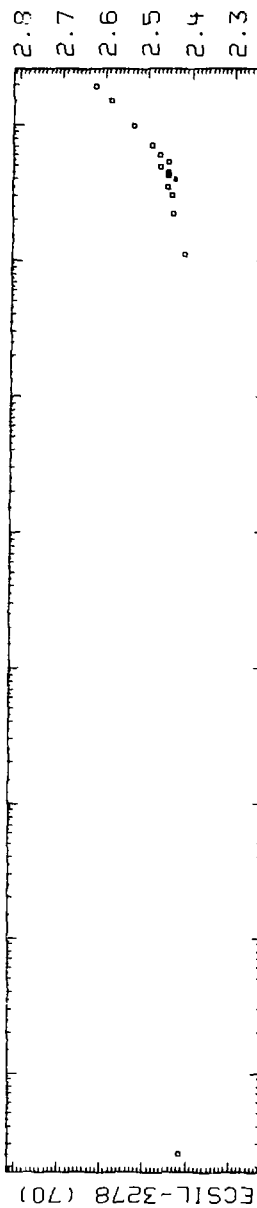
NEUTRONS/FISSION

03/01/74

NEUTRONS/FISSION

92-U -235

PROMPT



11-125

MEV

92-U -235 -44

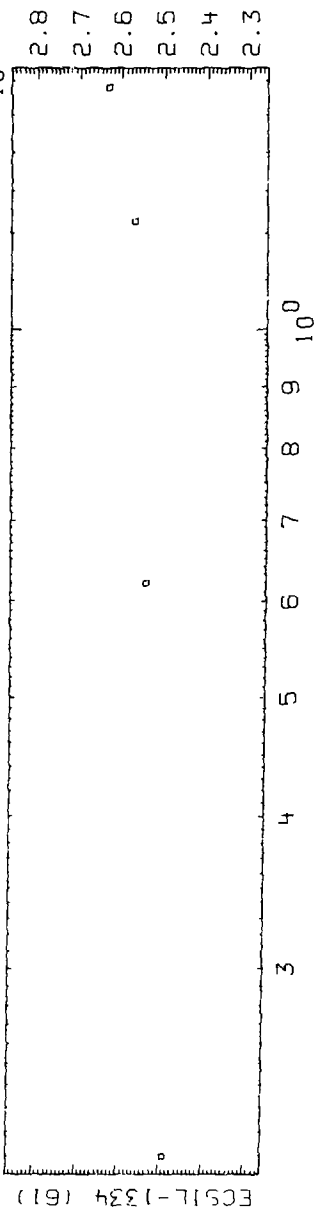
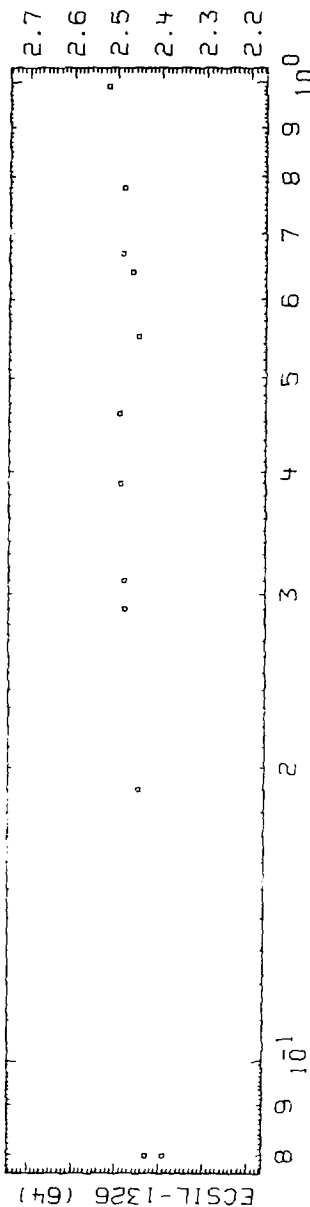
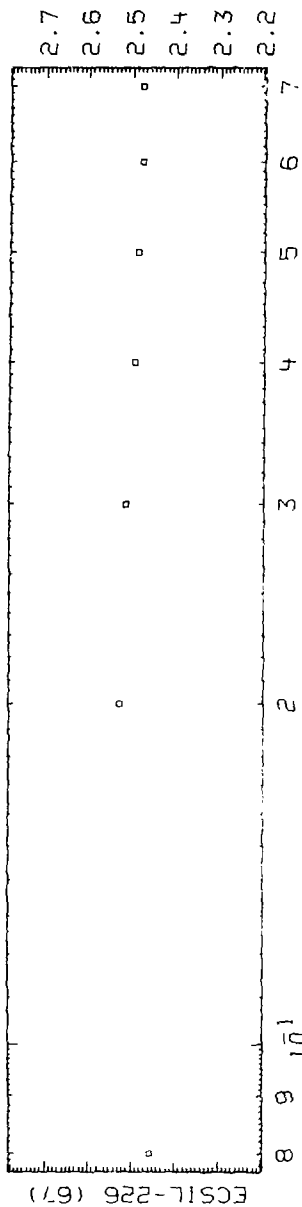
NEUTRONS/FISSION

03/01/74

NEUTRONS/FISSION

92-U -235

PROMPT



11-126

MEV

92-U -235 -45

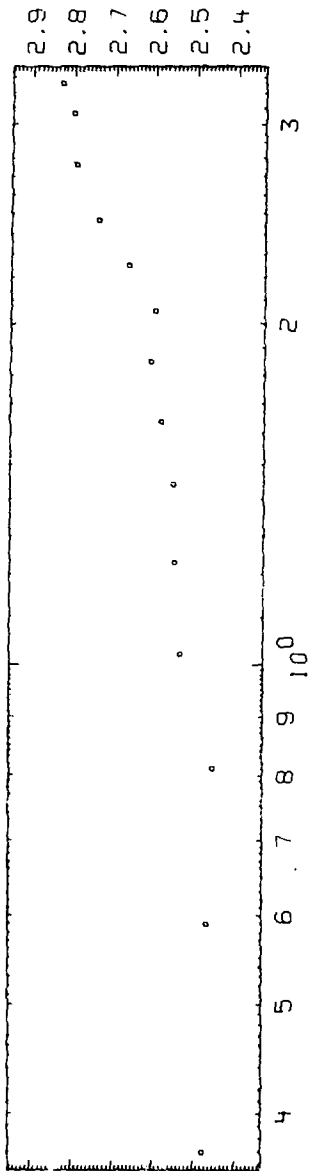
NEUTRONS/FISSION

03/01/74

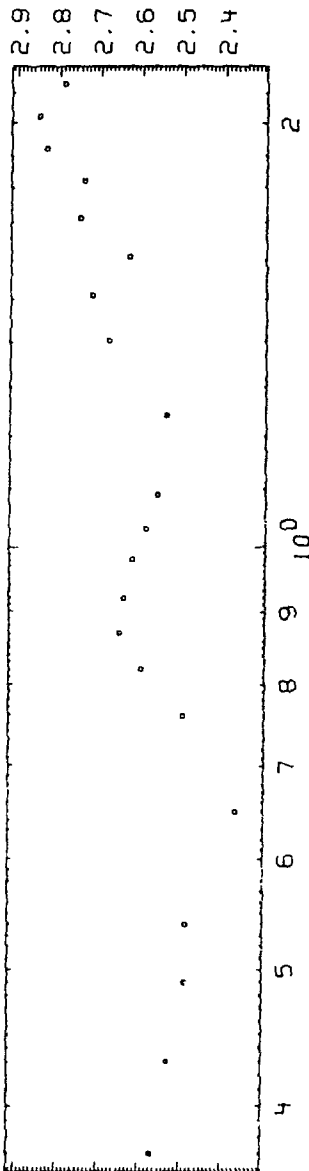
NEUTRONS/FISSION
PROMPT

92-U -235

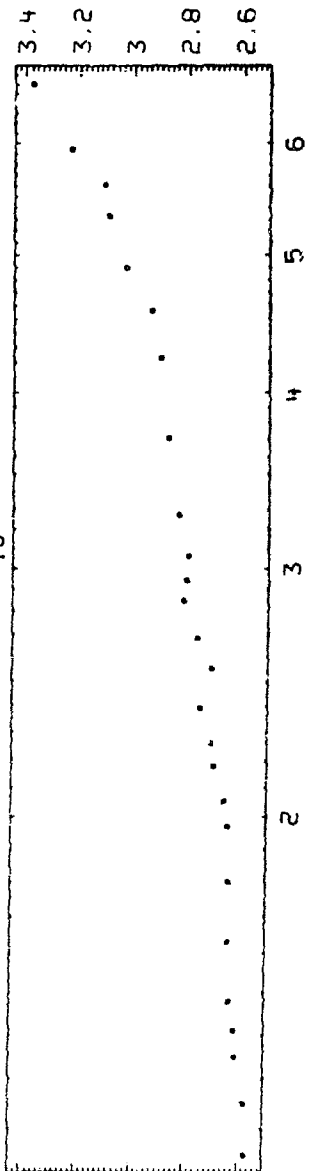
ECSIL-219 (66)



ECSIL-3281 (69)



ECSIL-3314 (70)



NEUTRONS/FISSION

11-127

MEV

92-U -235 -46

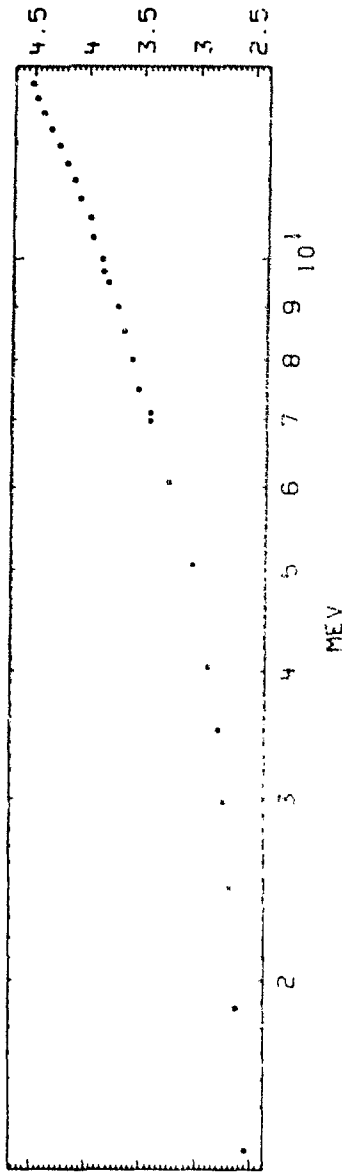
03/01/74

NEUTRONS/FISSION
PROMPT

92-U -235

NEUTRONS/FISSION

ECSIL-211 (67)



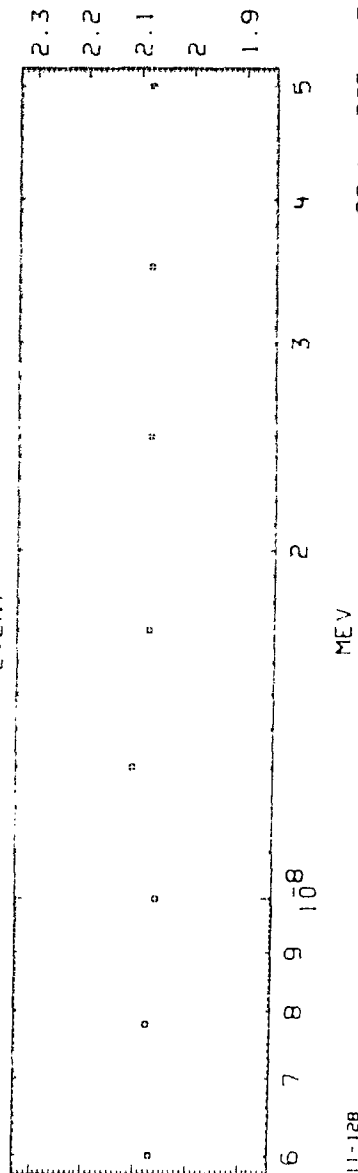
03/01/74

NEUTRONS/NONELASTIC
EVENT

92-U -235

RATIO

ECSIL-1390 (58)



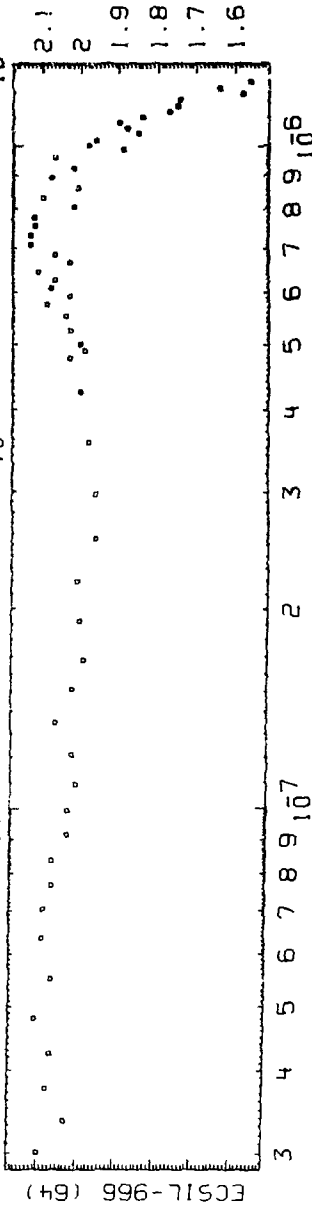
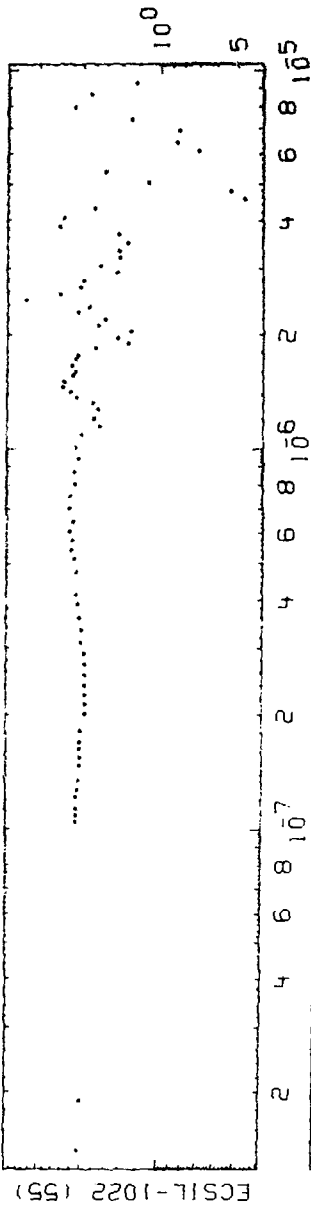
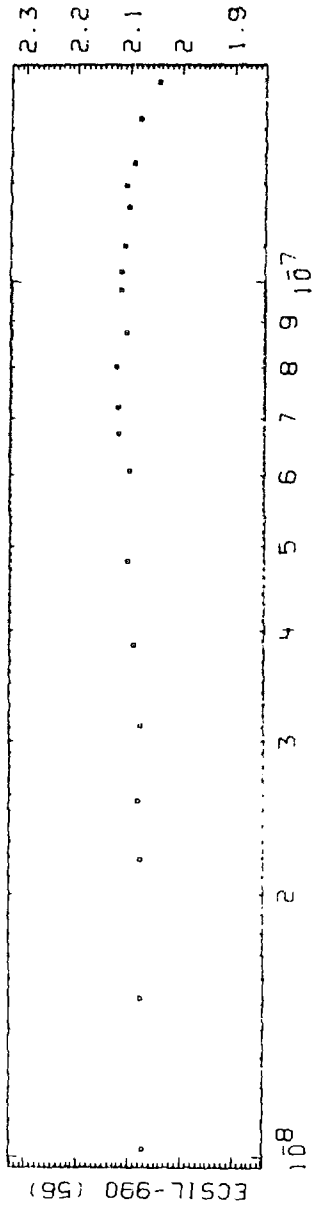
11-128

92-L -235 -47

03/01/74

NEUTRONS/NONELASTIC
EVENT

92-U -235



RATIO

MEV

11-129

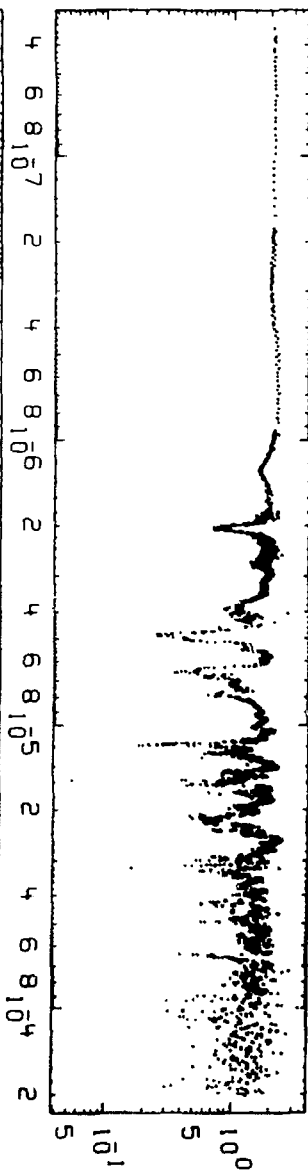
92-U -235 -48

03/01/74

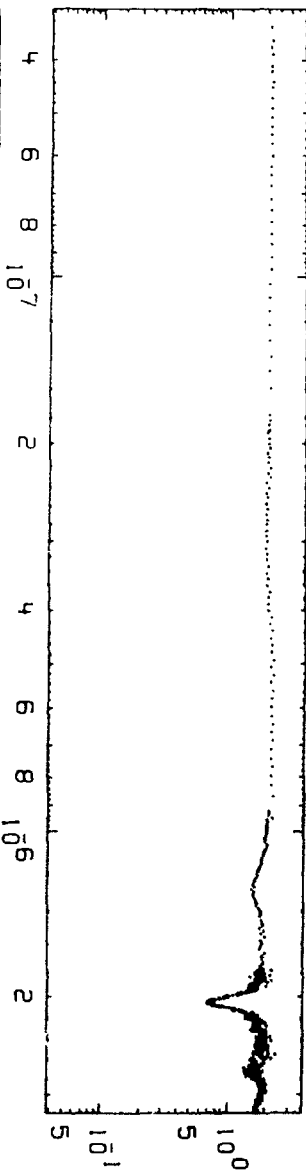
NEUTRONS/NONELASTIC
EVENT

92-U -235

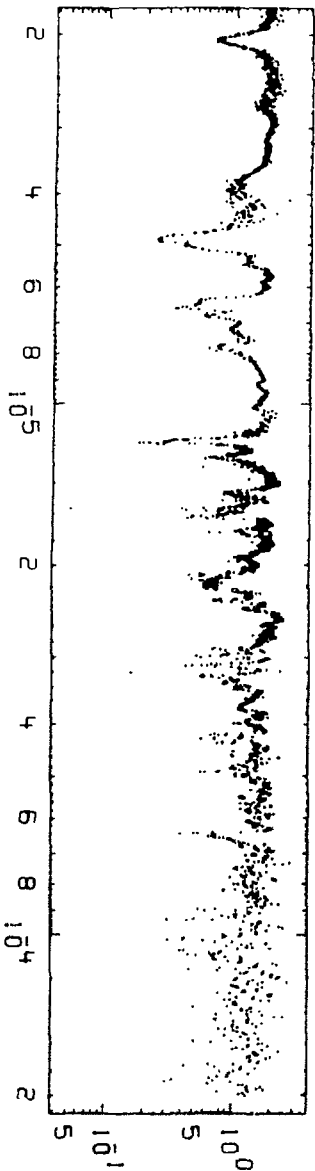
(EXPANDED BELOW)
ECSIL-1011 (65)



ECSIL-1011 (65)



ECSIL-1011 (65)



11-130

MEV

RATIO

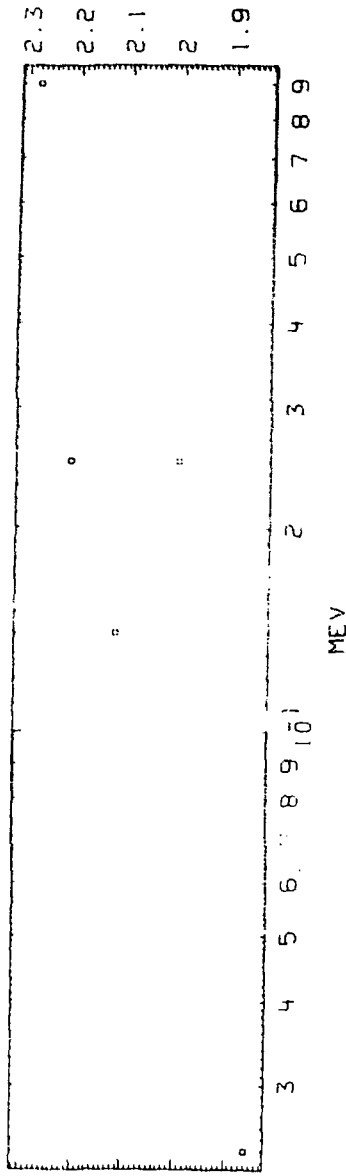
92-U -235 -49

03/01/74

NEUTRONS/NONELASTIC
EVENT

92-U -235

ECSIL-1360 (56)



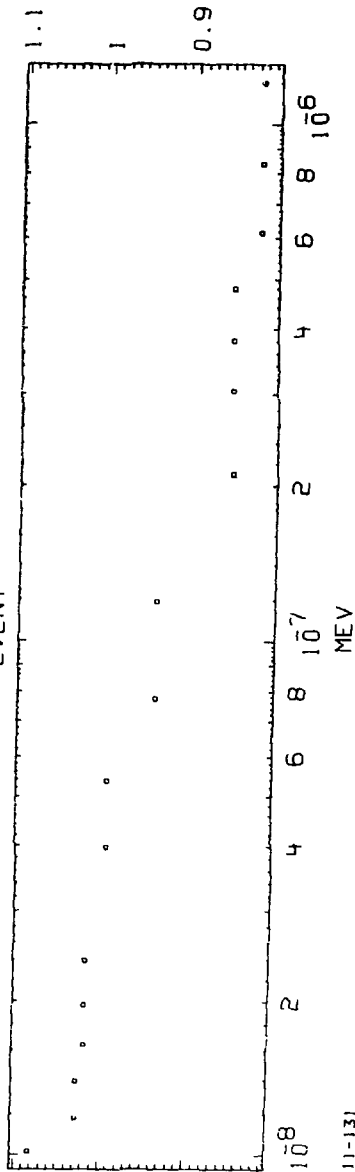
RATIO

03/01/74

NEUTRONS/NONELASTIC
EVENT

92-U -235

ECSIL-1212 (55)



RELATIVE

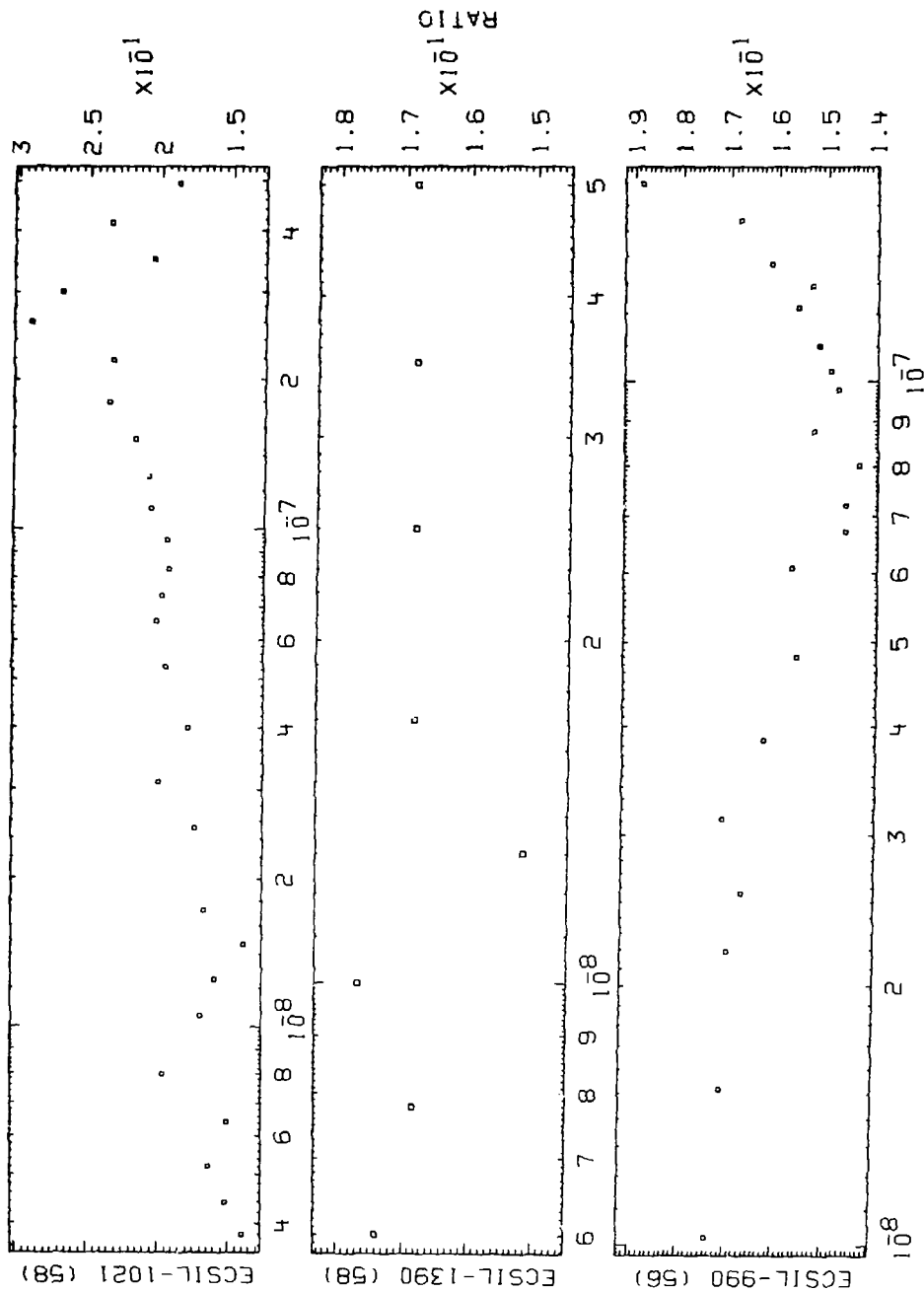
11-131

92-U -235 -50

03/01/74

CAPTURE/FISSION
RATIO

92-U -235



11-132

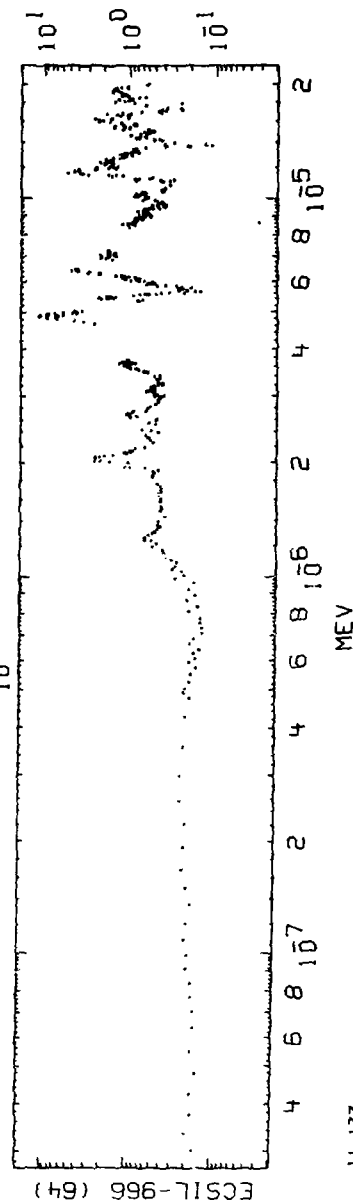
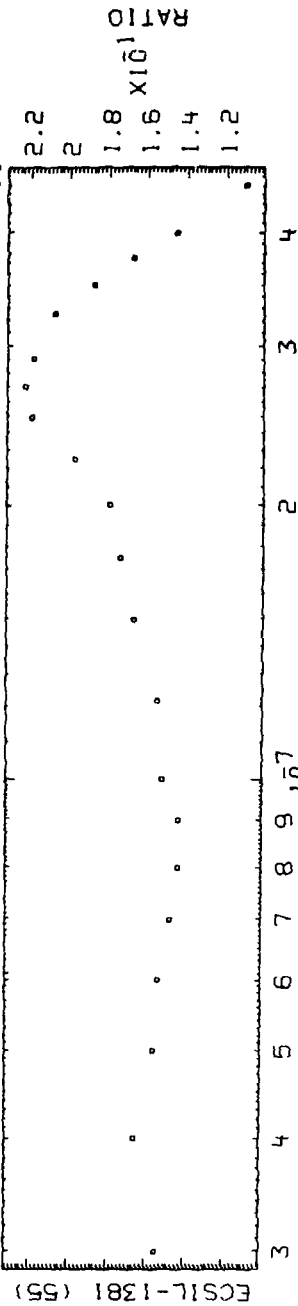
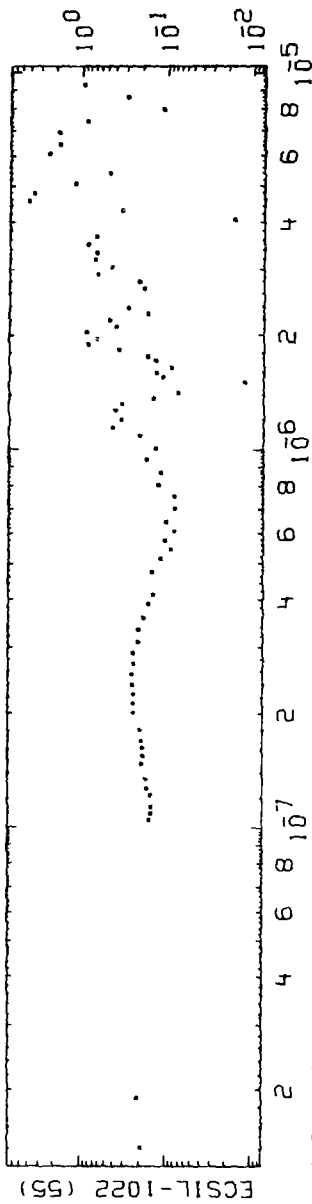
MEV

92-U -235 -51

03/01/74

CAPTURE/FISSION
RATIO

92-U -235



11-133

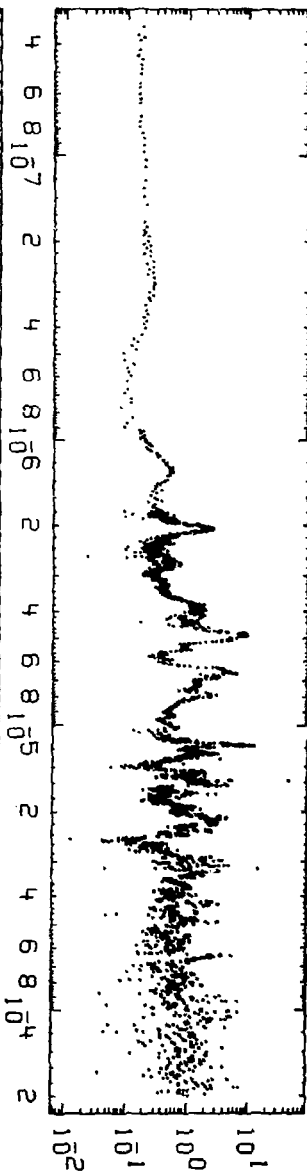
92-U -235 -52

03/01/74

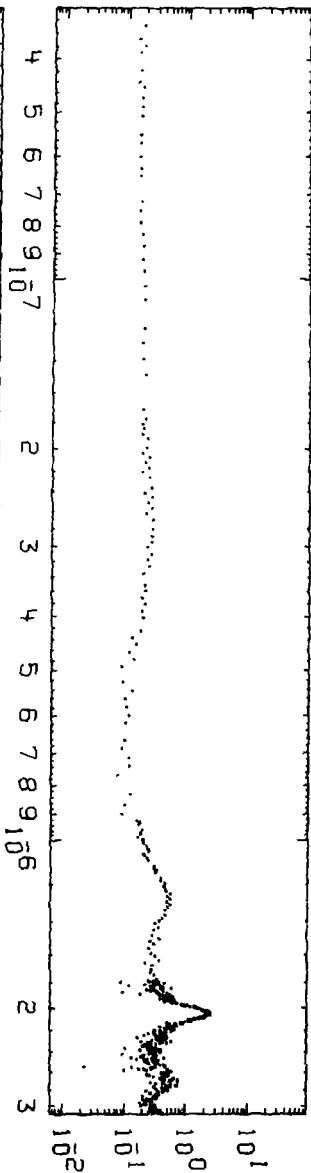
CAPTURE/FISSION
RATIO

92-U-235

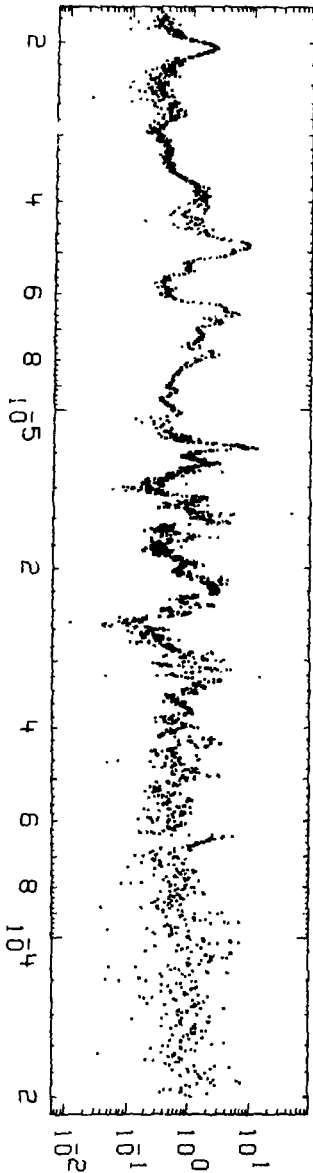
(EXPANDED BELOW)
ECSIL-1011 (65)



ECSIL-1011 (65)



ECSIL-1011 (65)



11-134

MEV

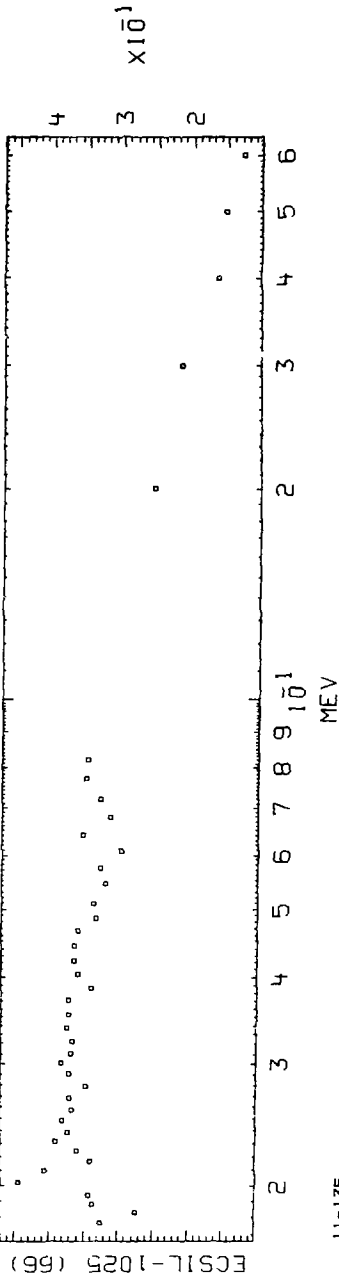
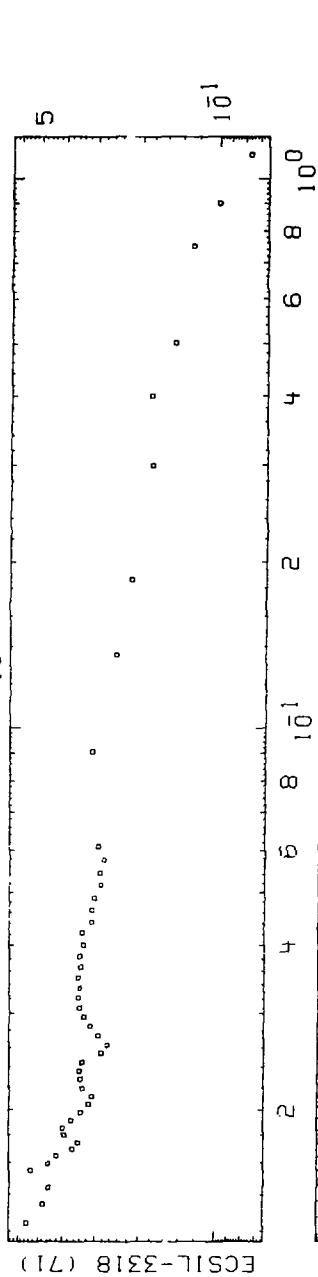
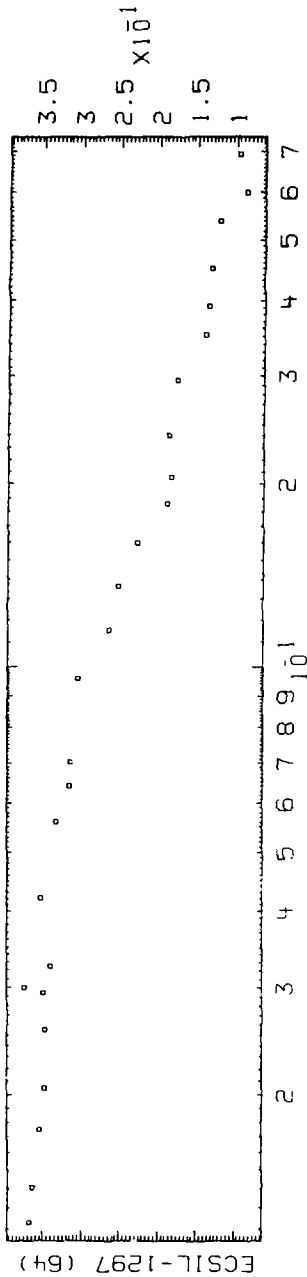
92-U-235 -53

RATIO

03/01/74

CAPTURE/FISSION
RATIO

92-U -235



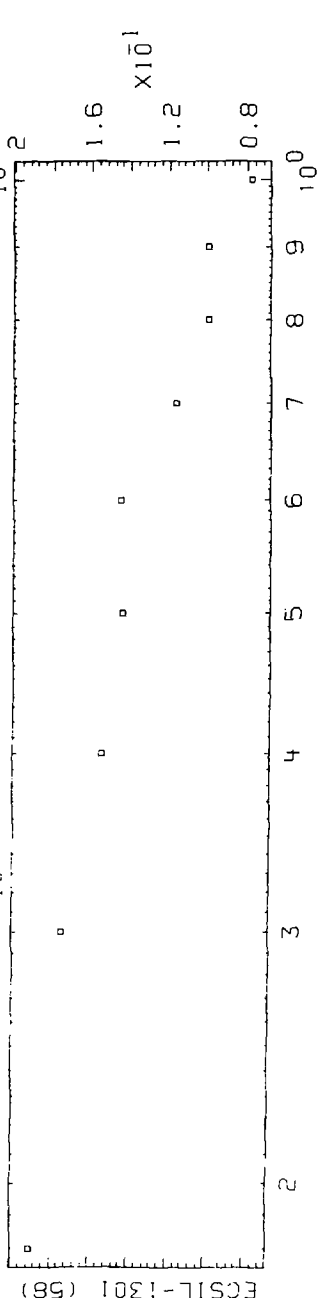
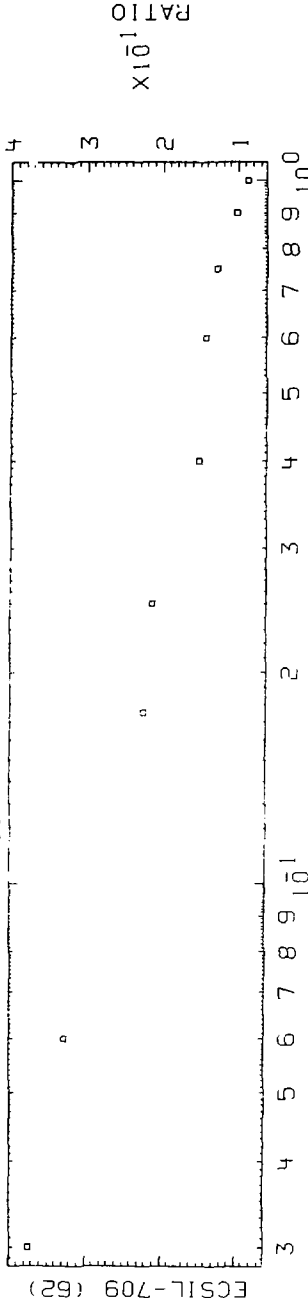
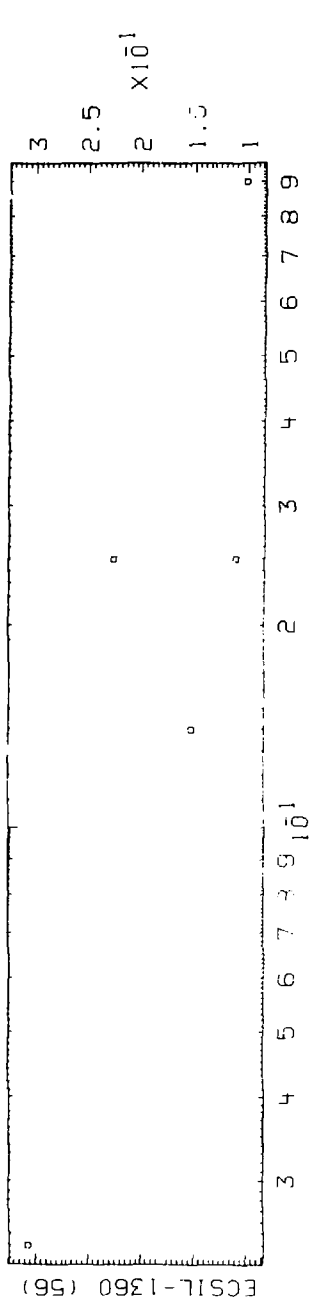
11-135

92-U -235 -54

03/01/74

CAPTURE/FISSION
RATIO

92-U -235



MEV

11-136

92-U -235 -55

03/01/74

TOTAL
CROSS SECTION

92-U -235

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 1463	1.7200- 8		8.5000+ 2		58 1463	9.9000- 7		8.6000+ 1	
54 1300	2.5000- 8		7.0000+ 3	5.0000+ 0	54 6	1.0000- 3		1.8000+ 1	
53 1384	2.5300- 8		6.9100+ 2	5.0000+ 0	54 6	1.6000- 1		1.1500+ 1	
54 1279	2.5300- 8		7.2900+ 2	1.5000+ 1					

03/01/74

ELASTIC

92-U -235

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
57 444	5.0000- 1		5.9000+ 0		57 444	1.0000+ 0		4.0000+ 0	
56 149	5.0000- 1	6.0010- 2	5.9010+ 0	6.3010- 1	56 149	1.0000+ 0	5.0000- 2	4.0000+ 0	4.0000- 1

03/01/74

FISSION

92-U -235

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
1 68 2105	2.5300- 8		5.8730+ 2	3.5000+ 0	65 1072	2.4000- 2		2.3600+ 0	6.0000- 2
68 209	2.5300- 8		5.8290+ 2	6.4000+ 0	67 1388	3.0000- 2		2.1900+ 0	6.0000- 2
56 1333	2.5300- 8		5.5200+ 2	6.0000+ 0	67 1388	6.4000- 2		1.7800+ 0	1.3000- 1
58 1389	2.5300- 8		6.0500+ 2	6.0000+ 0	70 3241	5.5200- 1		1.0850+ 0	4.3000- 2
65 1372	2.5300- 8		5.8200+ 2	1.0000+ 1	70 3241	6.4400- 1		1.0660+ 0	4.2000- 2
59 1302	2.5300- 8		5.8000+ 2	7.0000+ 0	50 1413	1.4000+ 1		2.1600+ 0	9.0000- 2
65 1214	2.5300- 8		5.7200+ 2	6.0000+ 0	56 771	1.4100+ 1		2.2000+ 0	7.0010- 2
58 1164	2.5300- 8		5.6900+ 2	6.0000+ 0	58 608	1.4600+ 1		2.3000+ 0	1.5000- 1
59 1176	2.5300- 8		5.8200+ 2	1.2000+ 1	55 461	1.2000+ 2		1.5000+ 0	
65 1372	3.2160- 8	4.0000-11	5.1200+ 2	1.1000+ 1	55 461	3.8000+ 2		1.2400+ 0	
65 1372	6.2600- 8	1.0000-10	3.4300+ 2	9.0000+ 0					

03/01/74

N, GAMMA

92-U -235

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
60 360	2.5300- 8		9.6600+ 1	6.8000+ 0	58 1338	2.4000- 1		3.2700- 1	6.8670- 2
65 1342	2.4000- 2		8.6590- 1	9.8400- 2	58 1338	8.8000- 1		1.5700- 1	7.3630- 2
58 1338	2.4000- 2		6.2410- 1	7.9480- 2					

03/01/74

NEUTRONS/FISSION
PROMPT

92-U -235

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
65 1319	2.5300- 8		2.4110+ 0	2.3000- 2	56 1321	2.5000+ 0		2.6400+ 0	1.9000- 1
44 1318	2.5300- 8		2.4400+ 0		61 1068	2.5000+ 0		2.8000+ 0	8.0000- 2
55 1097	2.5300- 8		2.5000+ 0	1.0000- 1	55 1383	4.0000+ 0		3.1300+ 0	3.1000- 1
56 1065	2.5300- 8		2.4500+ 0	1.5000- 1	58 1121	4.0000+ 0	3.0000- 1	3.0100+ 0	1.2000- 1
58 1320	2.5300- 8		2.4050+ 0	3.7000- 2	55 1383	4.5000+ 0		3.2600+ 0	3.3000- 1
66 1336	2.5300- 8		2.4300+ 0	8.0000- 2	57 1190	4.8000+ 0		3.2000+ 0	8.0000- 2
67 1417	2.5300- 8		2.4160+ 0	8.0000- 3	65 1319	7.5000+ 0		3.4900+ 0	6.0000- 2
66 1071	2.5300- 8		2.3550+ 0	1.4000- 2	58 1324	1.4000+ 1		4.1100+ 0	2.4000- 1
66 1323	2.5300- 8		2.4000+ 0	4.0000- 2	56 1321	1.4100+ 1		4.5200+ 0	3.2000- 1
61 1068	7.5000- 2		2.3900+ 0	5.0000- 2	61 1068	1.4200+ 1		4.2800+ 0	8.0000- 2
56 1145	8.0000- 2		2.4700+ 0	3.0000- 2	60 1325	1.4300+ 1		4.1700+ 0	3.0000- 1
55 1374	1.0000- 1		2.4600+ 0	5.0000- 2	65 1319	1.4800+ 1		4.4700+ 0	9.0000- 2
55 1373	1.0000+ 0		2.7800+ 0	3.2000- 1	58 1322	1.4800+ 1		4.7000+ 0	5.0000- 1
57 1190	1.2500+ 0		2.6500+ 0	7.0000- 2	58 1121	1.5000+ 1	5.0000- 1	4.5100+ 0	1.9000- 1

03/01/74

DELAYED NEUTRONS/FISSION

92-U -235

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
1 69 2899	2.5000- 8		1.5700- 2	7.0000- 4	69 1533	3.1000+ 0	2.0000- 1	1.8000- 2	2.0000- 3
48 1421	2.5000- 8		1.8350- 2		59 1425	3.3000+ 0		1.6000- 2	1.0000- 3
57 1066	2.5000- 8		1.5800- 2	5.0000- 4	60 1410	1.4000+ 1		2.2000- 2	5.0000- 3
71 3159	2.5000- 8		1.5800- 2	7.0000- 4	69 1533	1.4900+ 1	5.0000- 1	9.5000- 3	8.0000- 4
59 1425	2.4000+ 0		1.6000- 2	1.0000- 3	59 1425	1.5000+ 1		3.0000- 2	1.0000- 3

03/01/74

NEUTRONS/NONELASTIC EVENT

92-U -235

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
65 1076	2.5000- 8		2.0790+ 0	1.0000- 2	65 1342	2.4000- 2		1.7900+ 0	6.0000- 2
46 1313	2.5300- 8		2.1000+ 0	6.0000- 2	58 1338	2.4000- 2		1.9400+ 0	5.0000- 2
54 1385	2.5300- 8		2.0500+ 0	5.0000- 2	58 1338	2.4000- 1		1.9800+ 0	8.0000- 2
60 1287	2.5300- 8		2.0770+ 0	1.0000- 2	58 1338	8.8000- 1		2.2200+ 0	1.2000- 1
59 1285	2.5300- 8		2.0500+ 0	3.0000- 2	58 1324	1.4000+ 1		3.7100+ 0	2.0000- 1
70 1290	2.5300- 8		2.0760+ 0	1.5000- 2					

03/01/74

CAPTURE/FISSION
RATIO

92-U -235

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
58 1280	1.1000-9		1.7200-	1 2.2000-2
59 1302	2.9000-9		1.7100-	1 9.0000-3
65 1076	2.5000-8		1.6880-	1 5.6220-3
64 1262	2.5000-8		1.7180-	1 6.0000-4
67 1535	2.5300-8		1.7520-	1 2.8000-3
59 1285	2.5300-8		1.8540-	1 1.7350-2
54 1385	2.5300-8		1.8540-	1 2.8910-2
46 1313	2.5300-8		1.5710-	1 3.3060-2
62 1290	2.5300-8		1.7050-	1 8.4580-3
60 1287	2.5300-8		1.7000-	1 5.6350-3
66 1311	2.5300-8		1.7600-	1 3.0000-3
59 1452	2.5300-8		1.8400-	1 4.0000-3
66 1312	2.5300-8		1.7160-	1 3.3000-3
66 1077	2.5300-8		1.7160-	1 1.5000-3
62 1007	2.5300-8		1.7700-	1 4.0000-3
58 338	2.4000-2		2.5370-	1 3.2310-2
65 1342	2.4000-2		3.5200-	1 4.0000-2
58 1358	2.4000-1		2.3820-	1 5.0030-2
56 1338	0.8000-1		1.3030-	1 6.1100-2

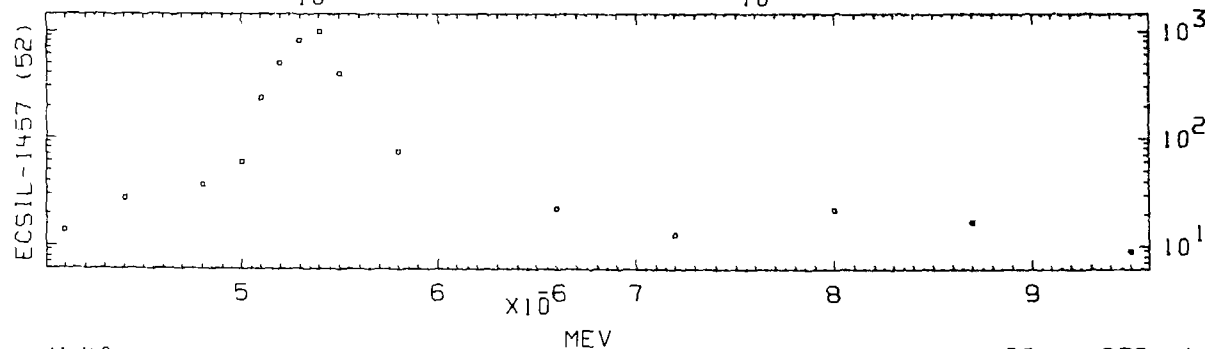
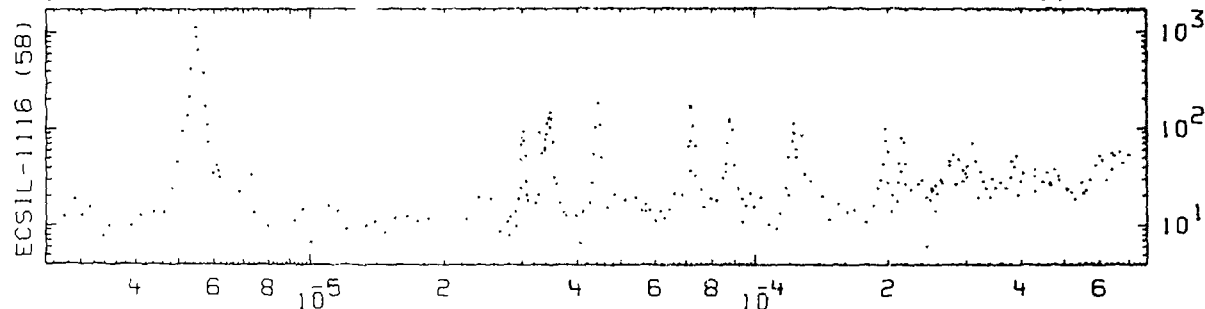
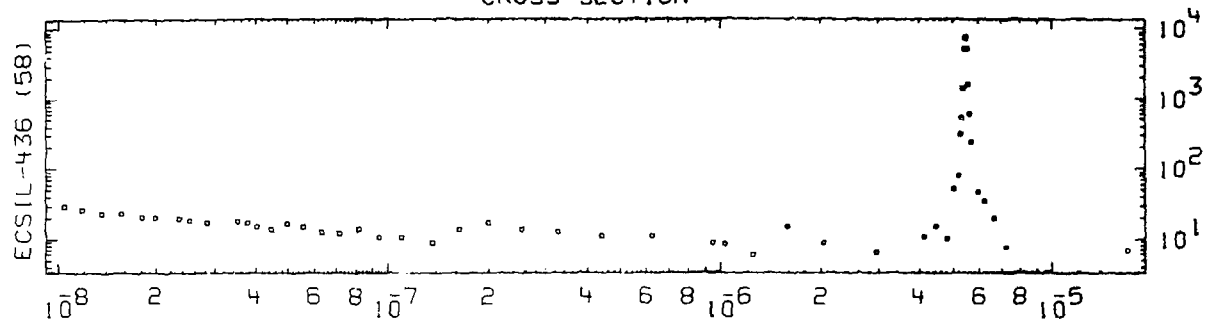
11-139

92-U -235 -58

03/01/74

TOTAL
CROSS SECTION

92-U -236



BARNs

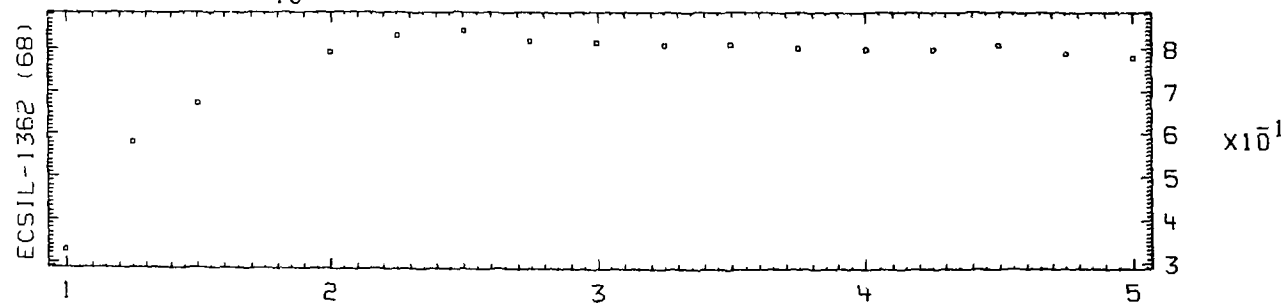
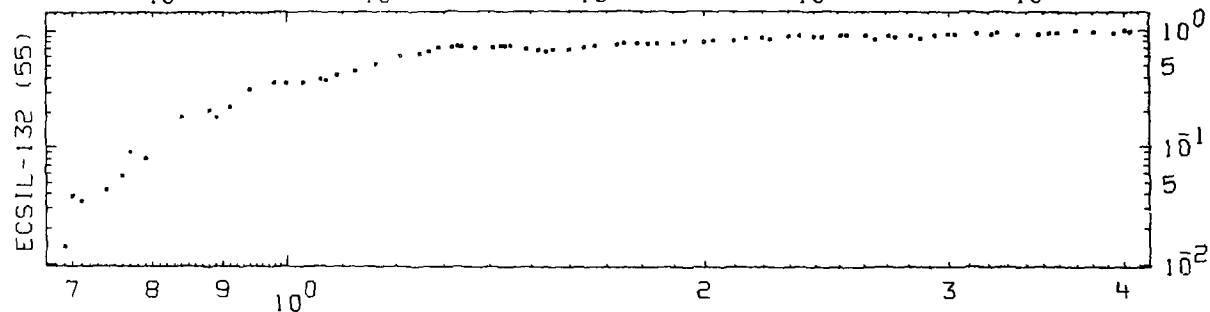
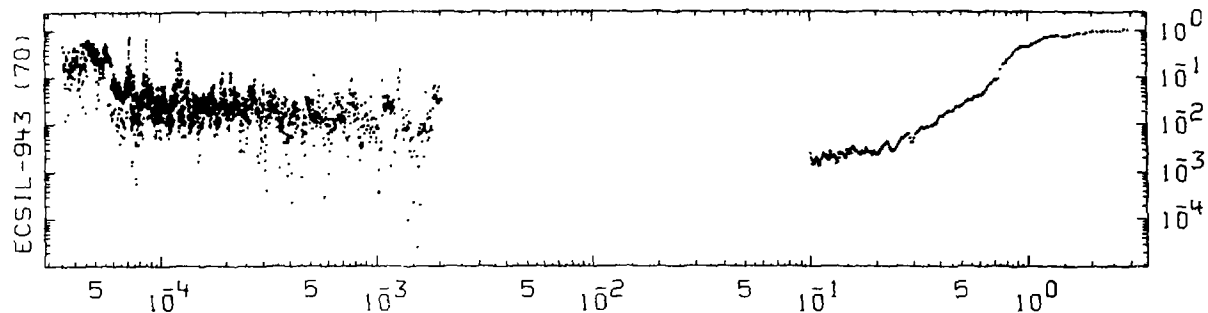
11-140

92-U -236 -1

03/01/74

FISSION
CROSS SECTION

92-U -236



11-141

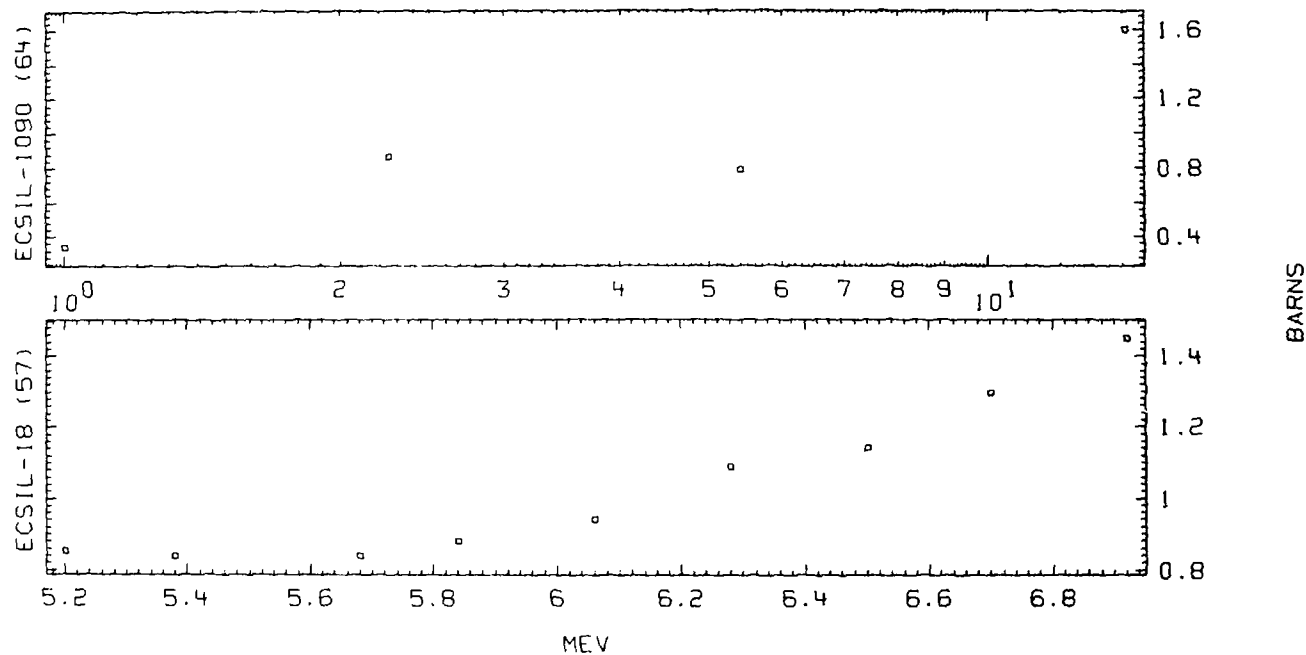
MEV

92-U -236 -2

03/01/74

FISSION
CROSS SECTION

92-U -236



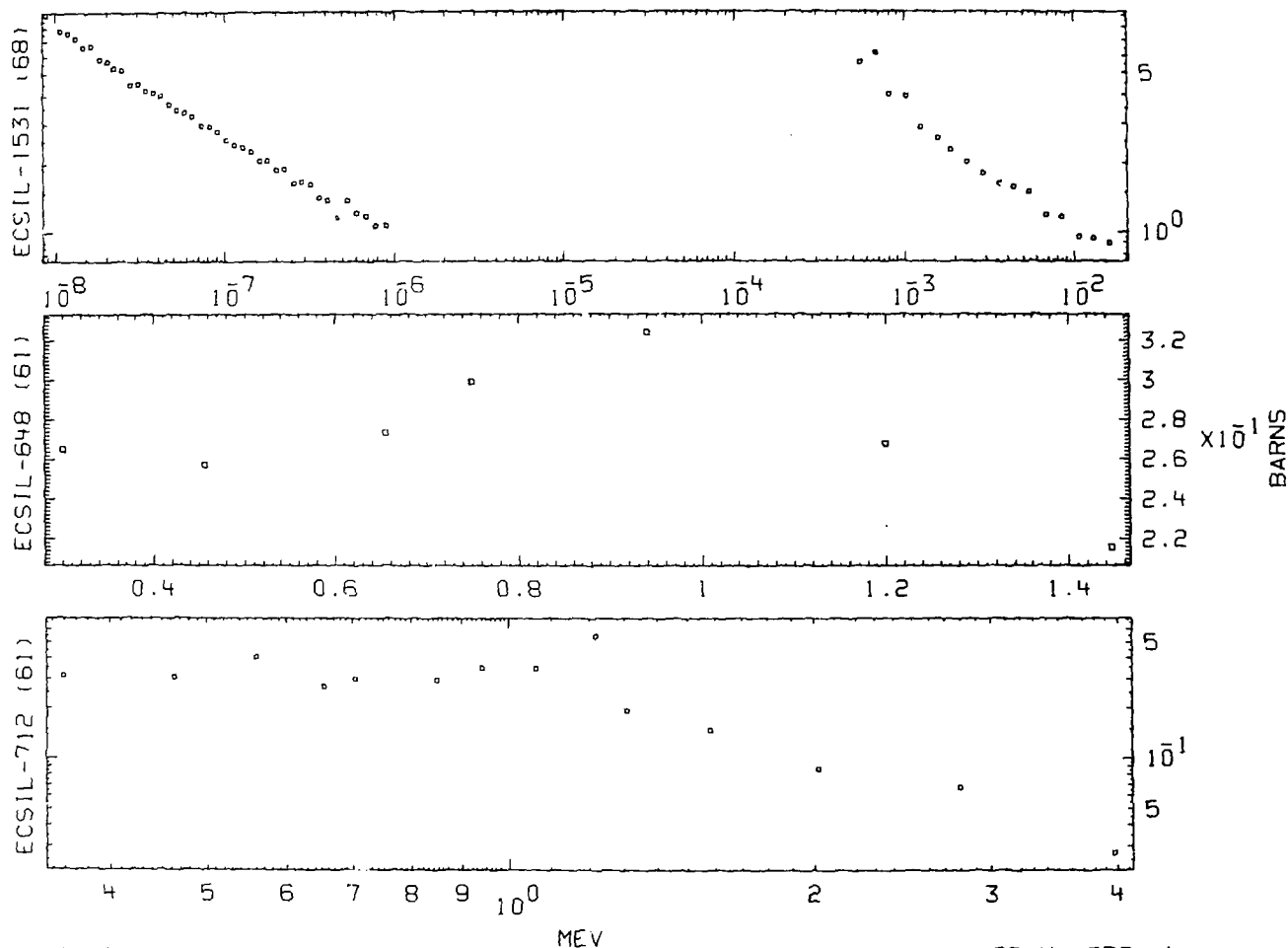
11-142

92-U -236 -3

03/01/74

N, GAMMA
CROSS SECTION

92-U -236



11-143

MEV

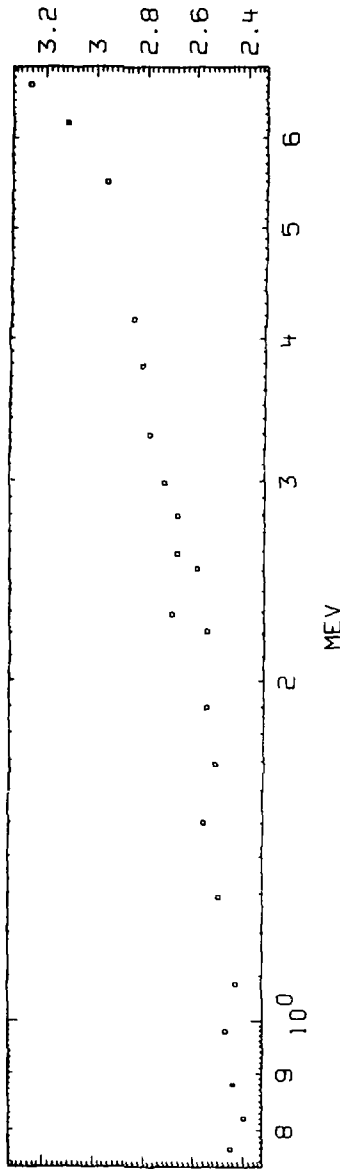
92-U -236 -4

03/01/74

NEUTRONS/FISSION
PROMPT

92-U -236

ECSIL-2509 (71)



03/01/74

ELASTIC

92-U -236

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58	436	2.5300- 8	1.0600+ 1	4.0000- 1

03/01/74

FISSION

92-U -236

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65	1091	1.2700- 1	7.0000- 3	1.8000- 3
65	1091	3.1200- 1	7.0000- 3	3.7000- 3
65	1091	5.0500- 1	1.0000- 2	6.9000- 3
50	1413	1.4000+ 1	1.8070+ 0	1.1000+ 0

03/01/74

N, GAMMA

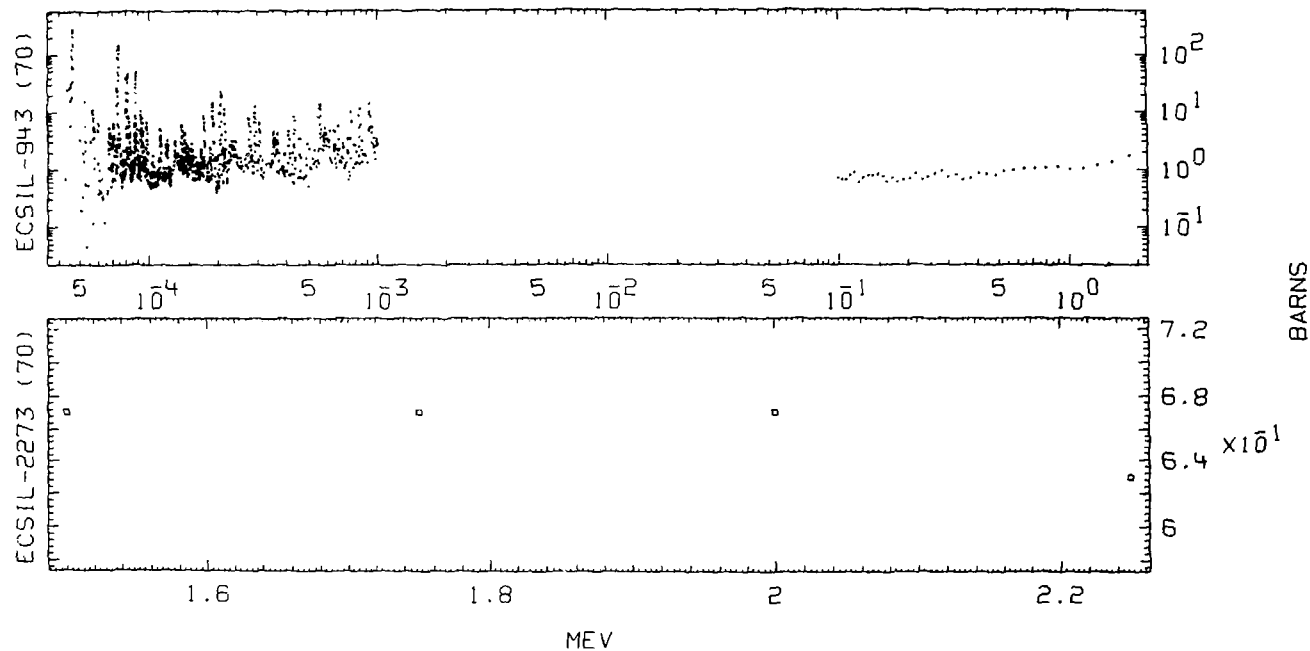
92-U -236

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
55	1127	2.5000- 8	2.4000+ 1	7.0000+ 0
58	438	2.5000- 8	5.5000+ 0	3.0000- 1
58	1163	2.5300- 8	5.5000+ 0	3.0000- 1

03/01/74

FISSION
CROSS SECTION

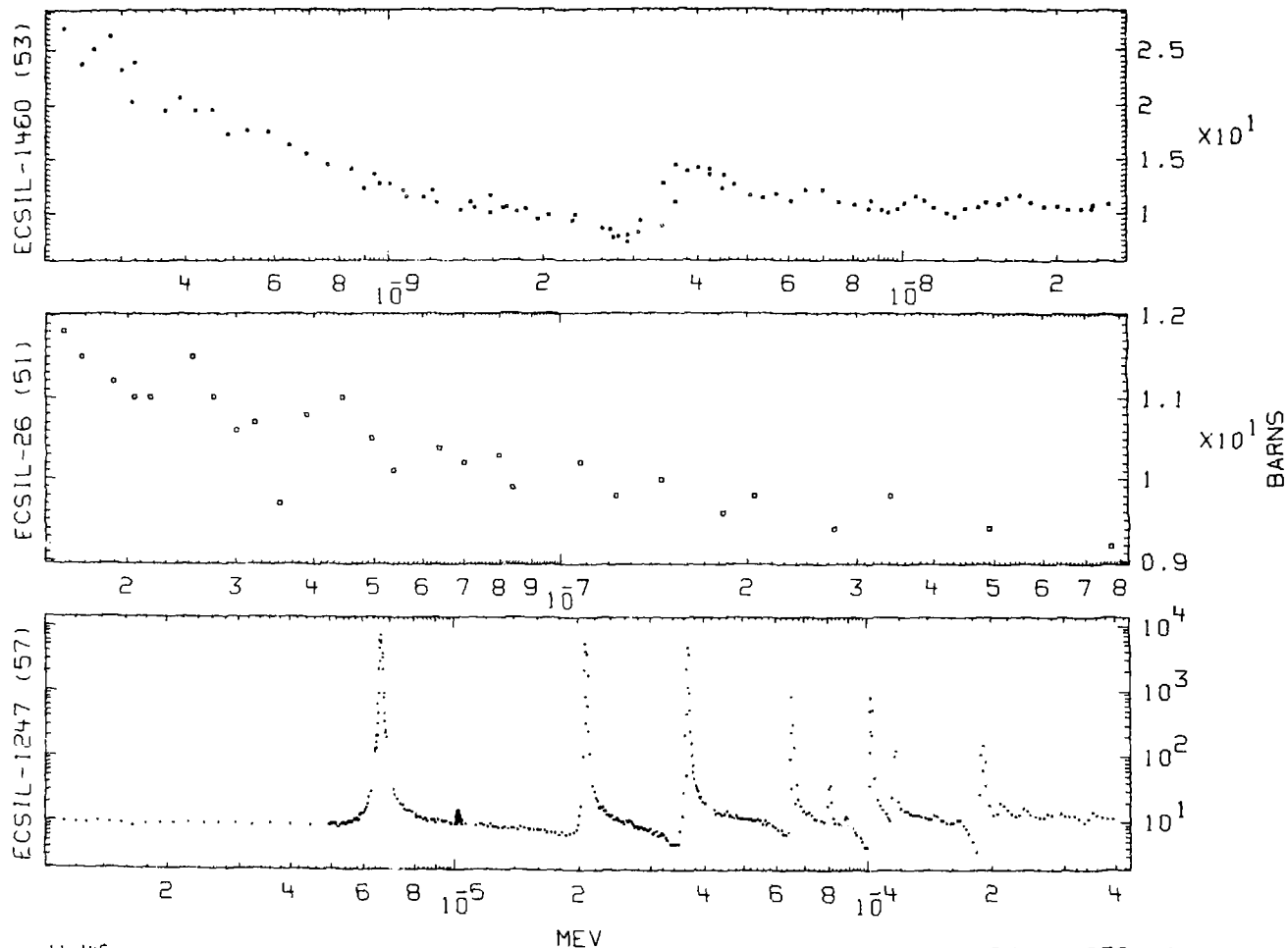
92-U -237



03/01/74

TOTAL CROSS SECTION

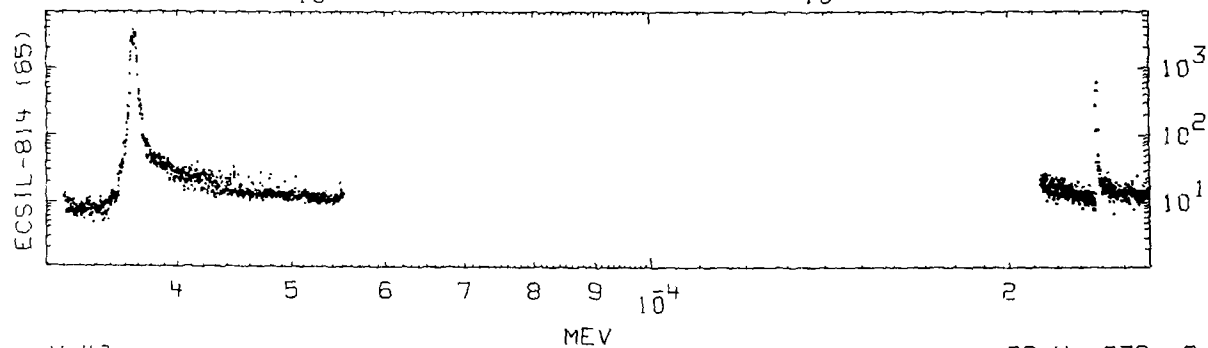
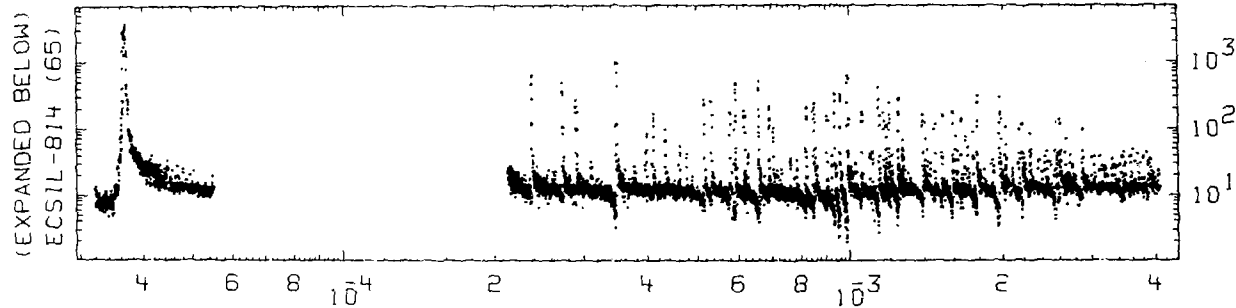
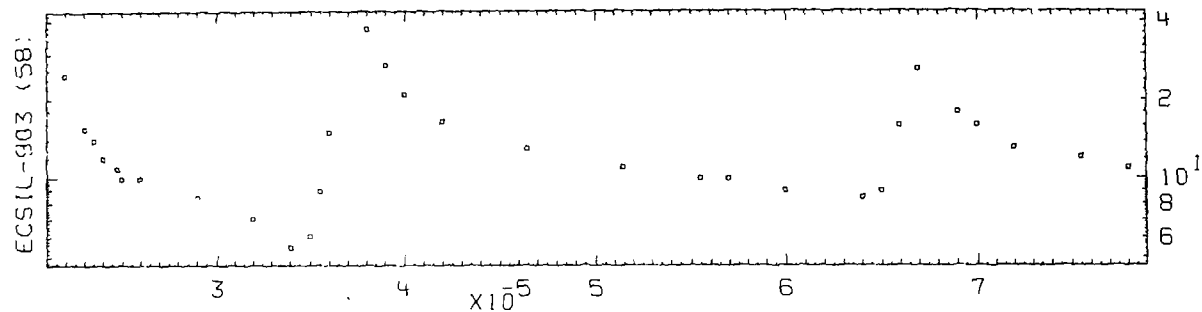
92-U -238



03/01/74

TOTAL
CROSS SECTION

92-U -238



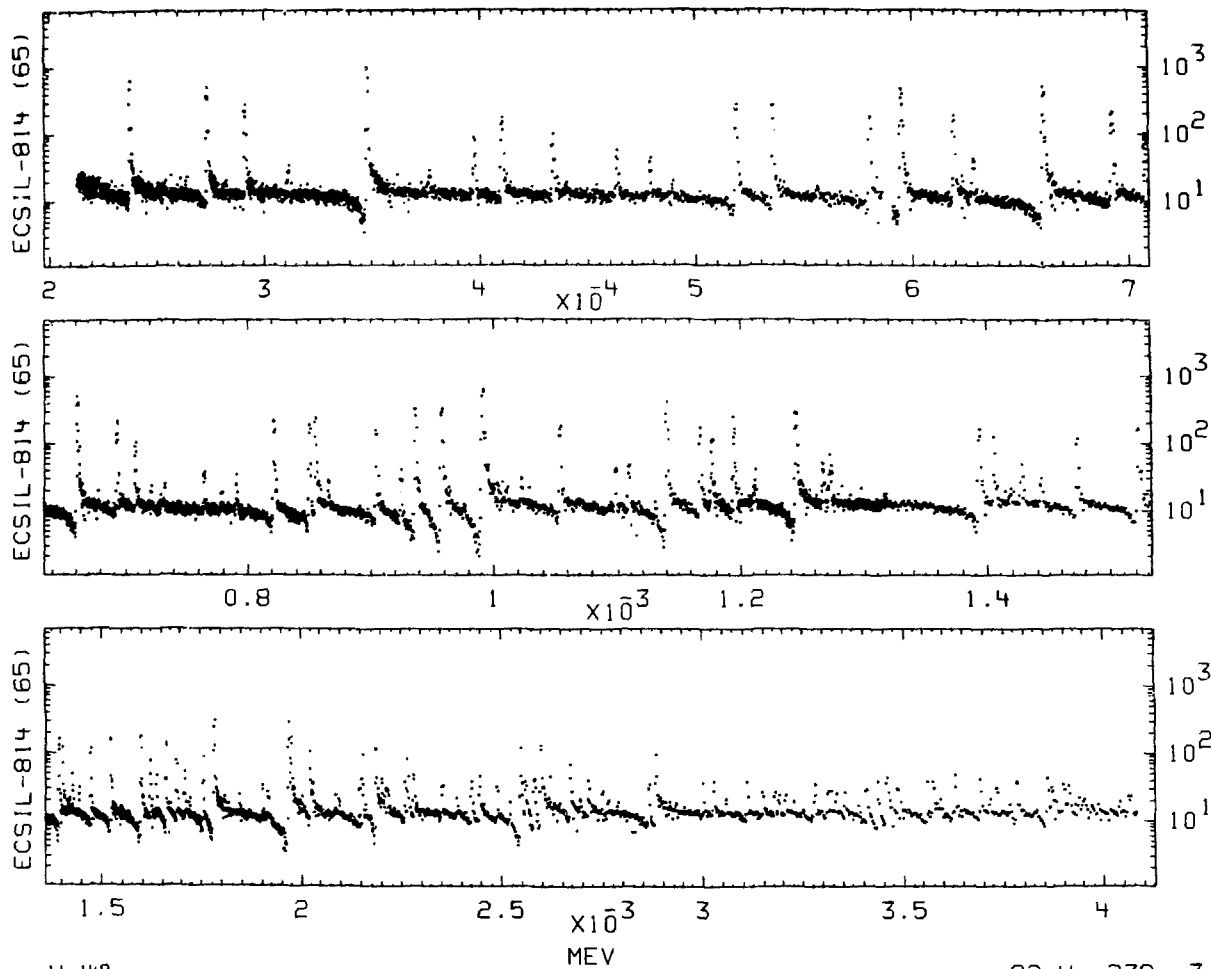
11-147

92-U -238 -2

03/01/74

TOTAL
CROSS SECTION

92-U -238



11-148

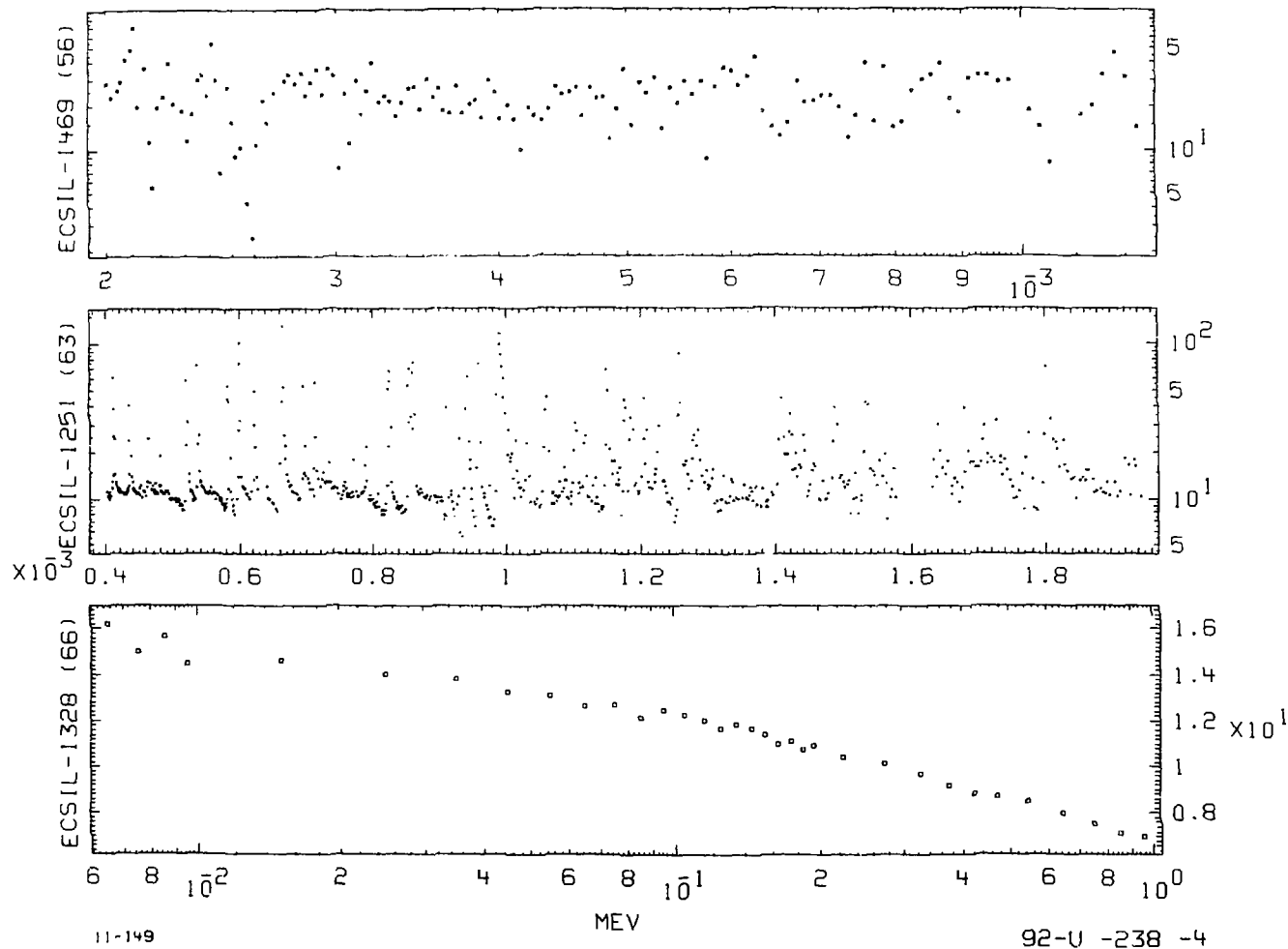
92-U -238 -3

03/01/74

TOTAL
CROSS SECTION

92-U -238

BARNs

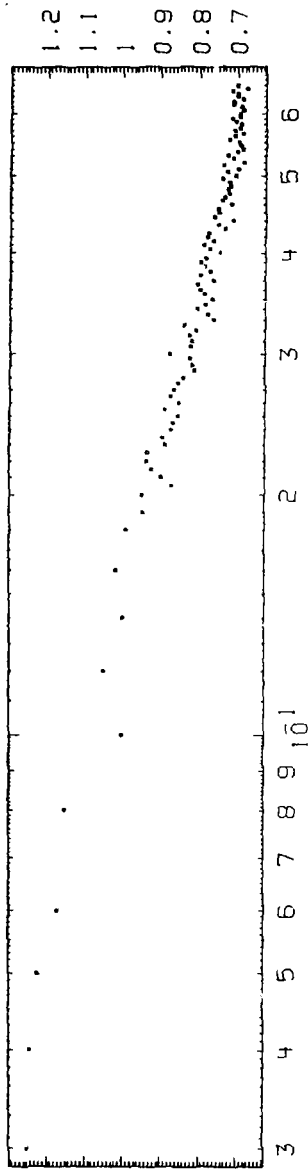


03/01/74

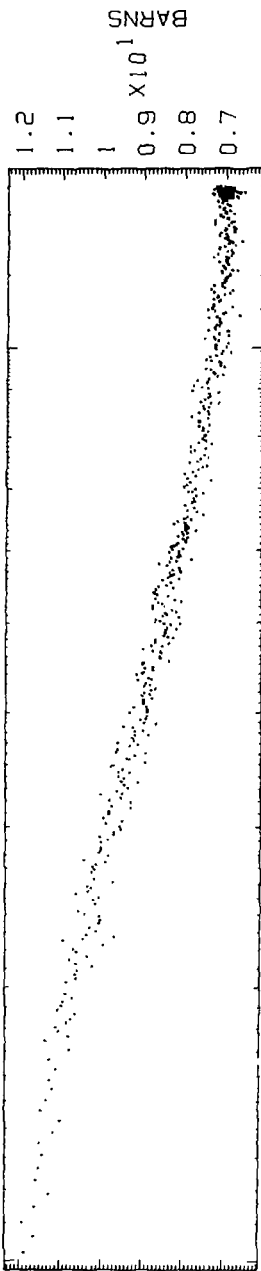
TOTAL
CROSS SECTION

92-U -238

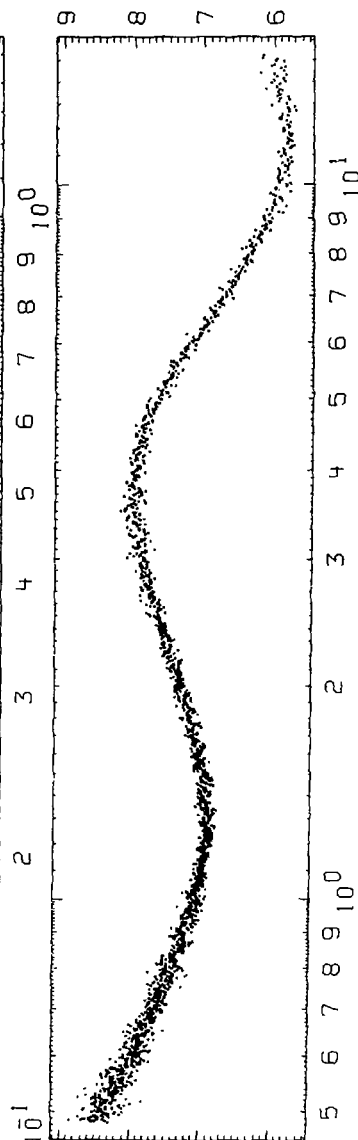
ECS1L-381 (64)



ECS1L-2849 (69)



ECS1L-3255 (72)



11-150

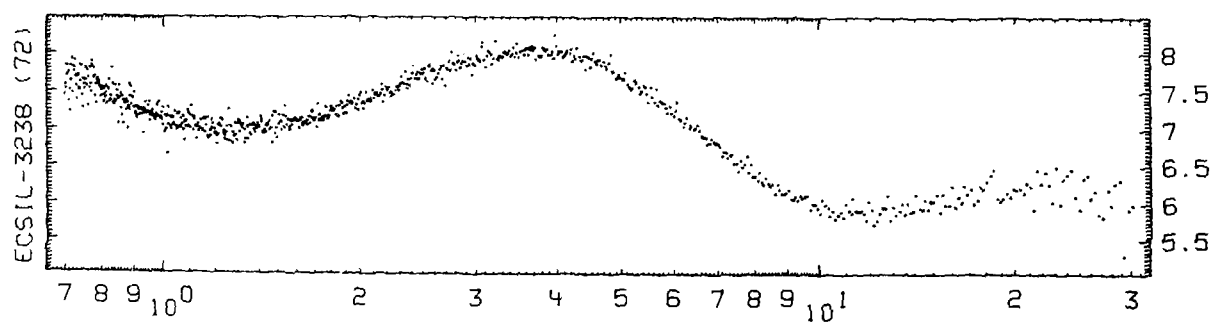
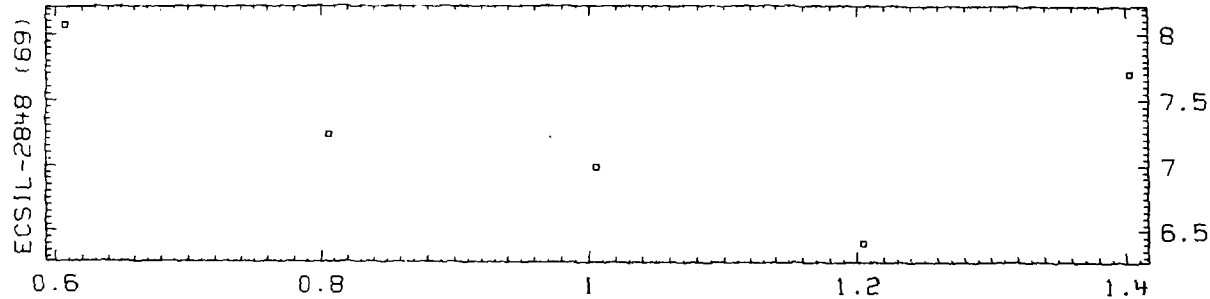
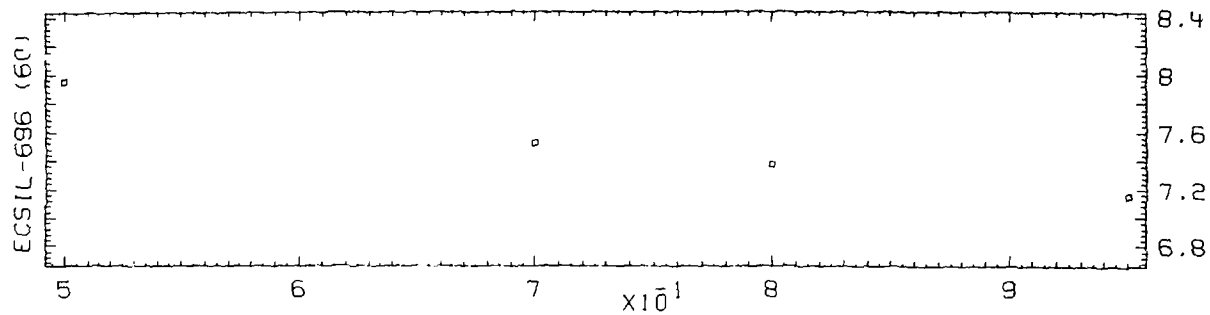
MEV

92-U -238 -5

03/01/74

TOTAL
CROSS SECTION

92-U -238



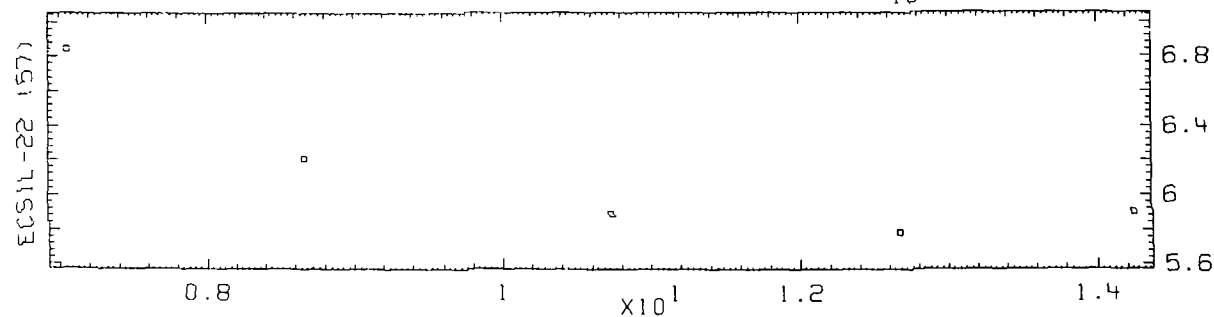
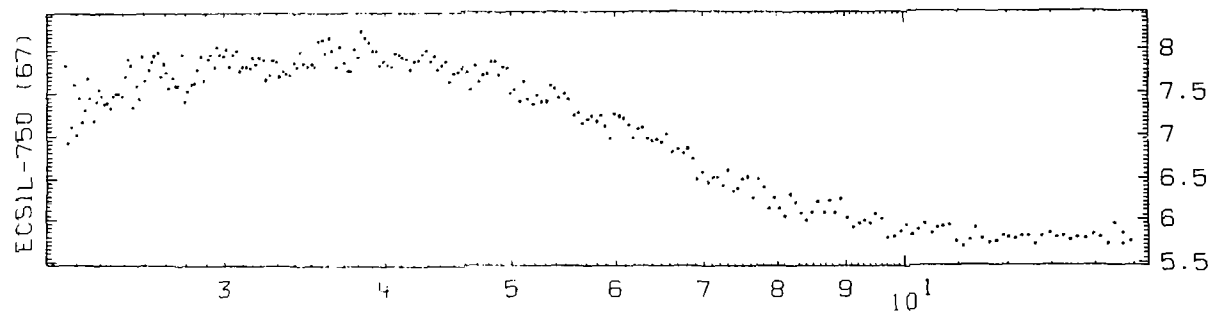
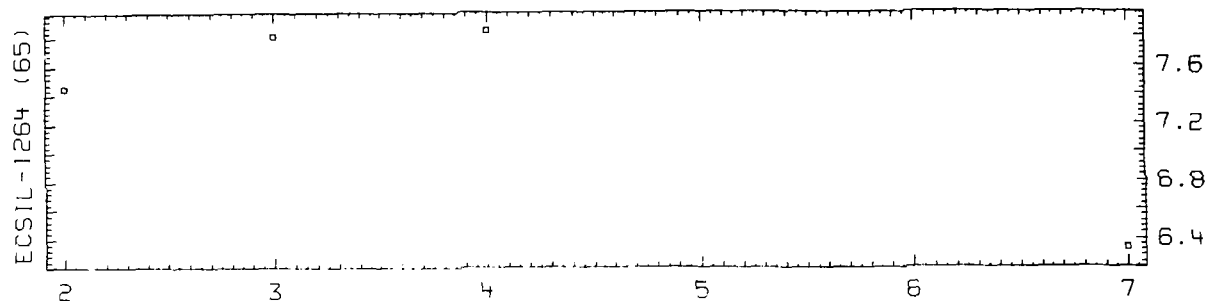
11-151

92-U -238 -6

03/01/74

TOTAL
CROSS SECTION

92-U -238



BARNs

11-152

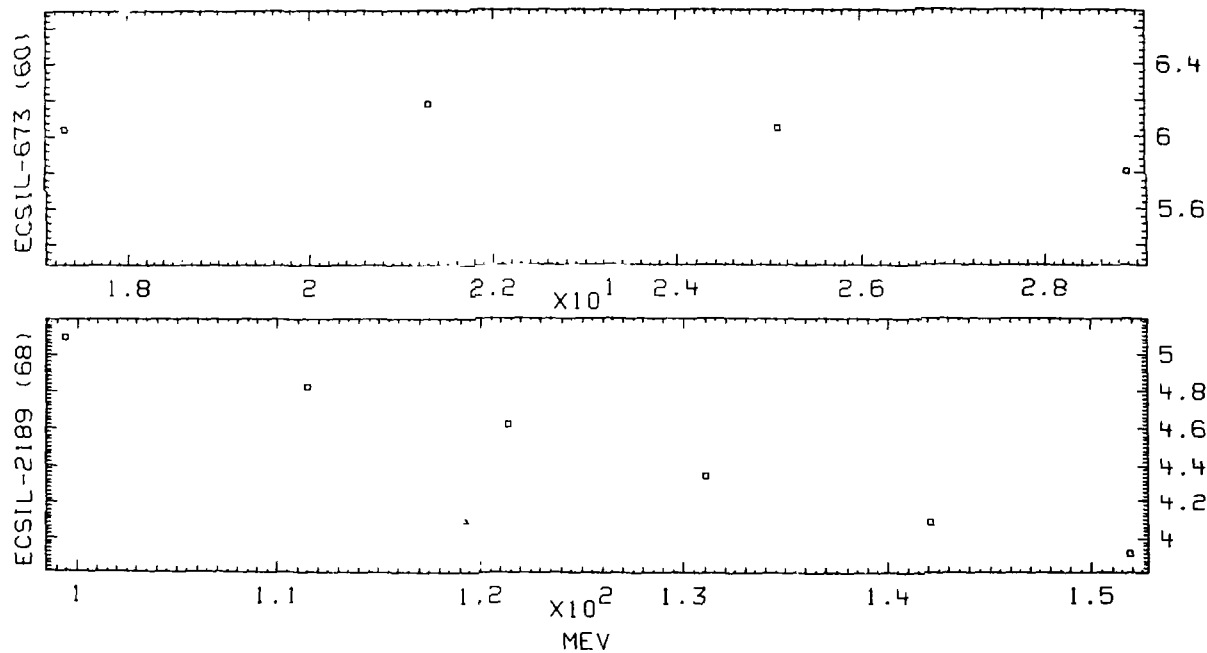
MEV

92-U -238 -7

03/01/74

TOTAL
CROSS SECTION

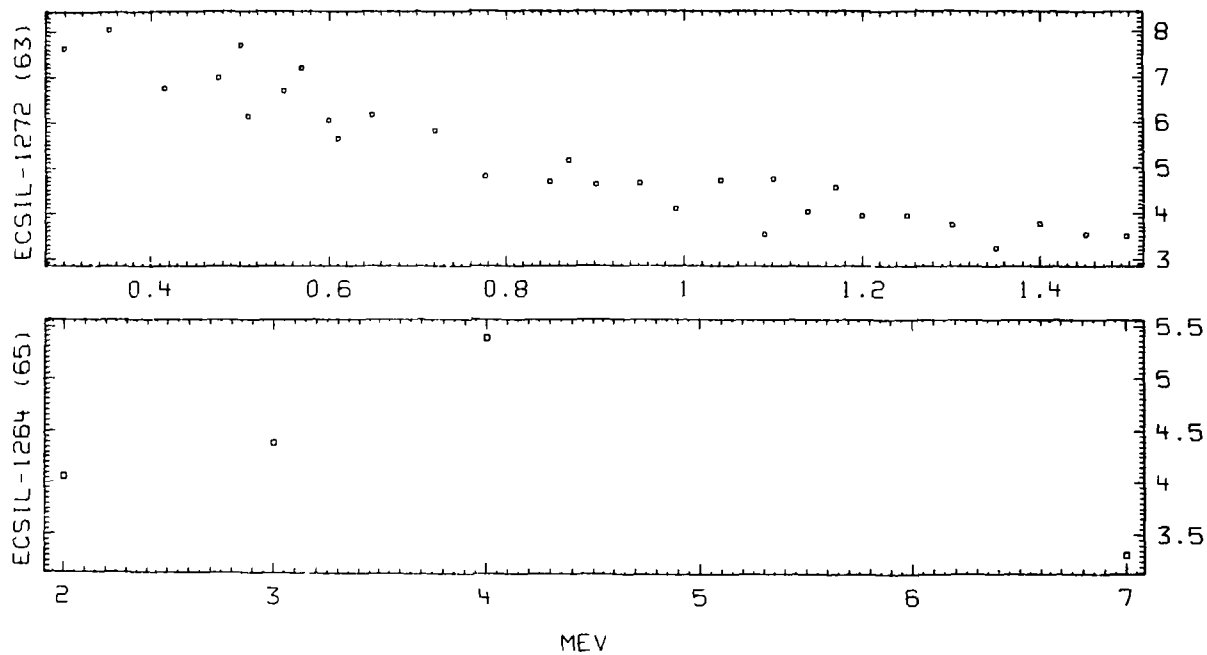
92-U -238



03/01/74

ELASTIC
CROSS SECTION

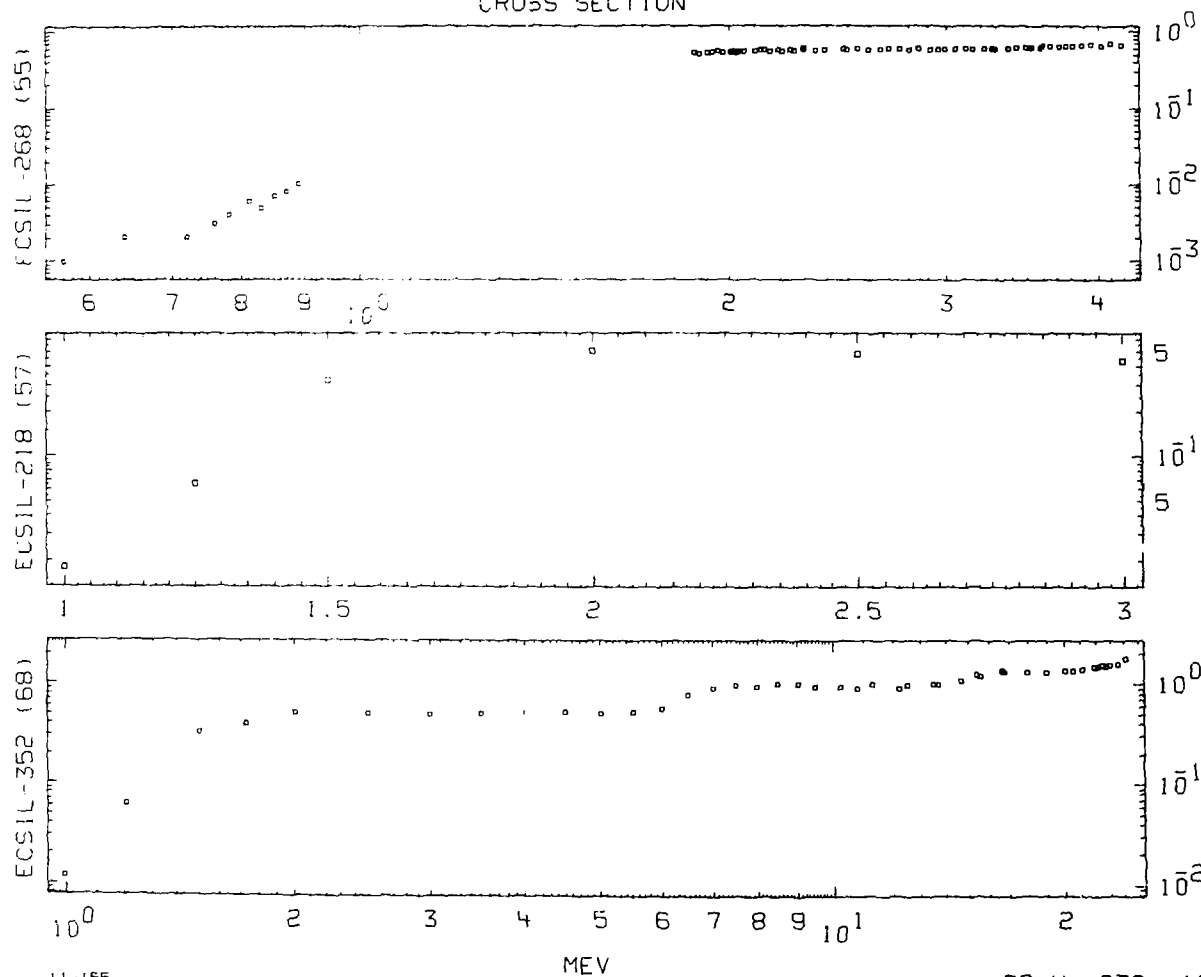
92-U -238



03/01/74

FISSION
CROSS SECTION

92-U -238



BARNs

11-155

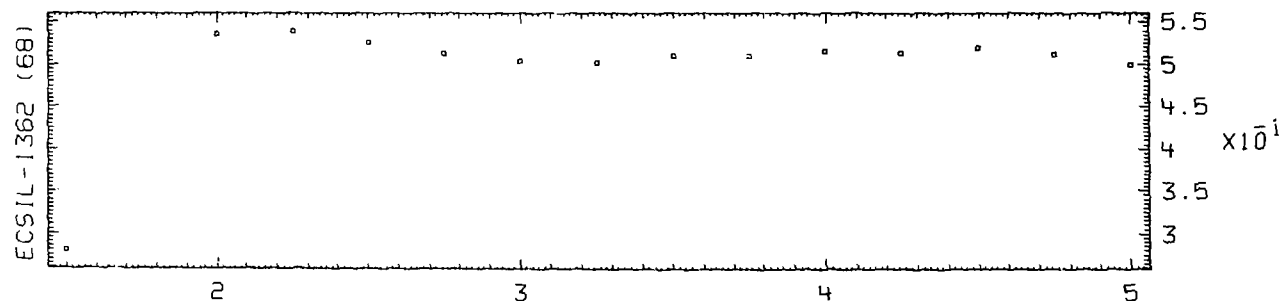
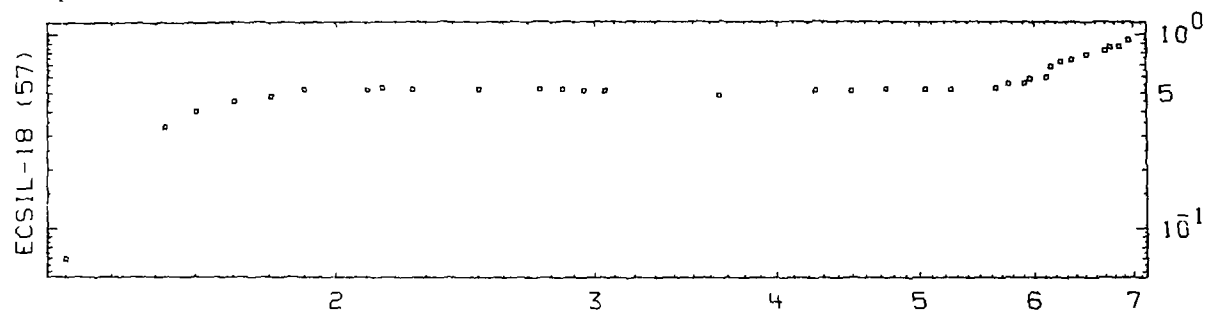
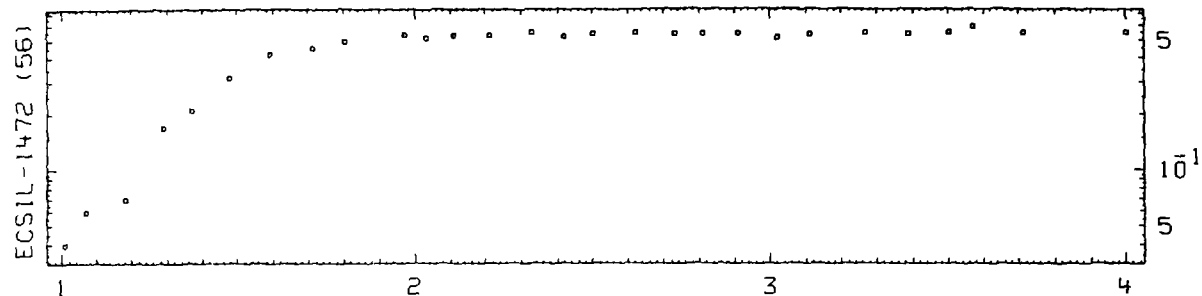
MEV

92-U -238 -10

03/01/74

FISSION
CROSS SECTION

92-U -238



BARNs

11-156

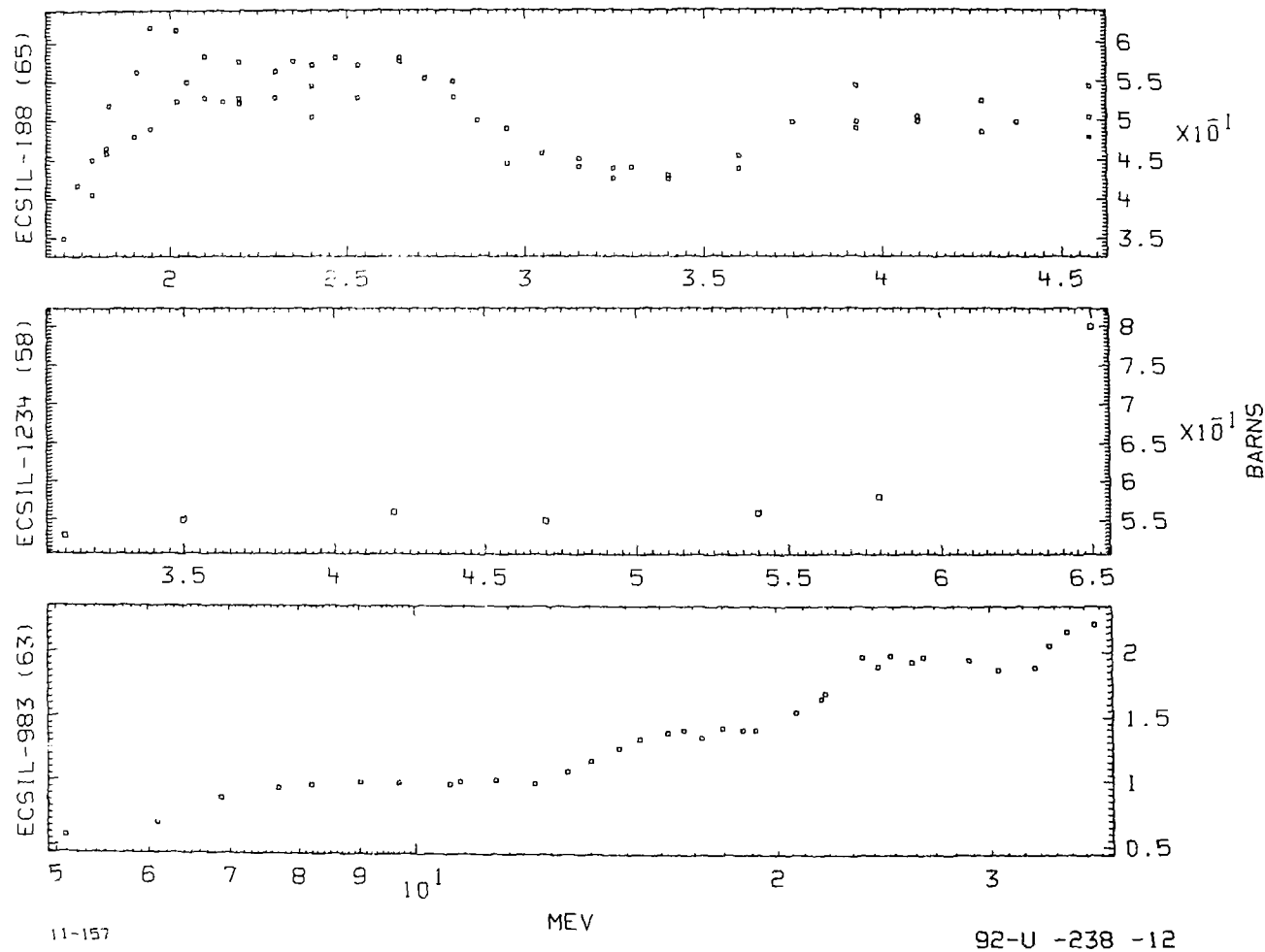
MEV

92-U -238 -11

03/01/74

FISSION
CROSS SECTION

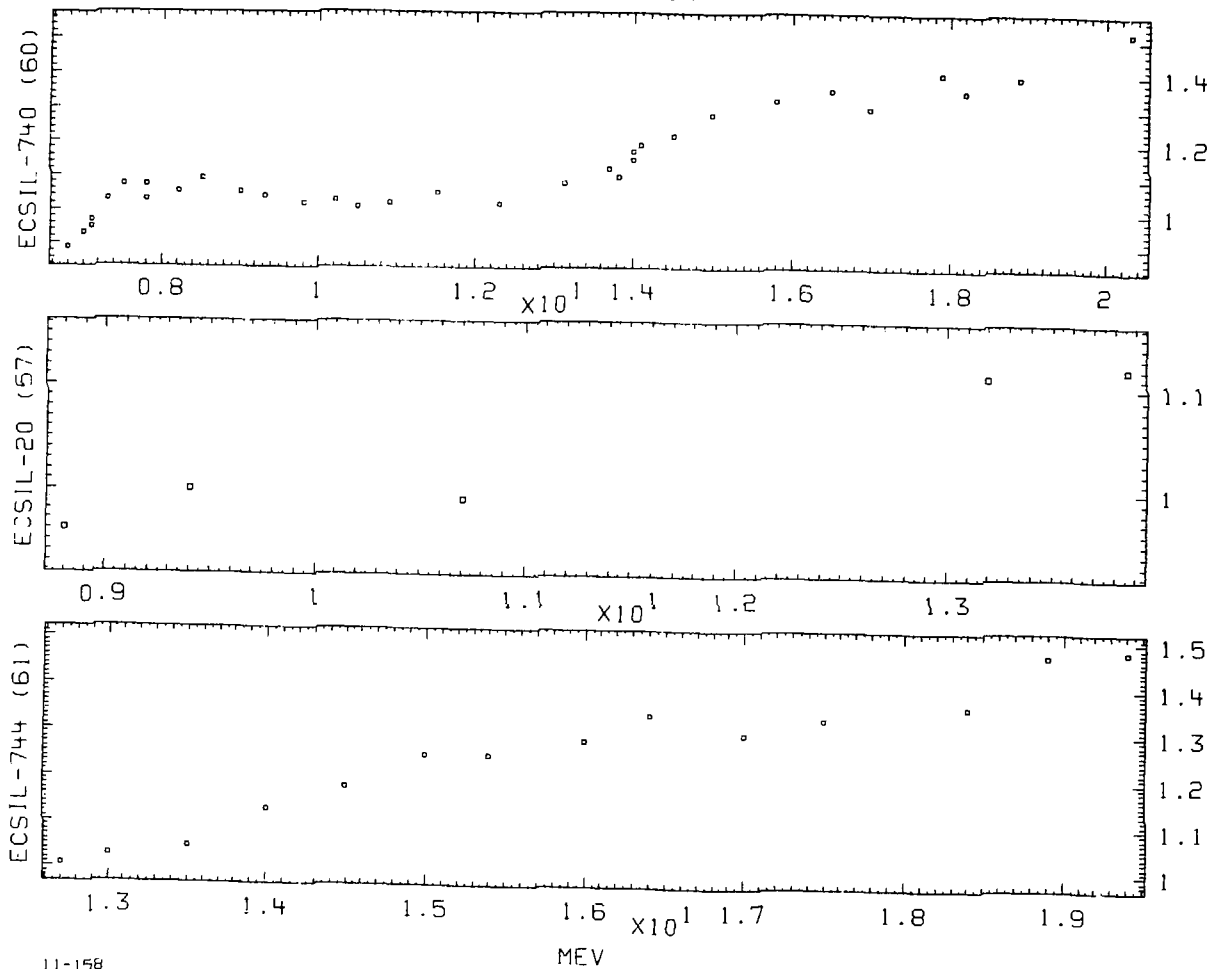
92-U -238



03/01/74

FISSION
CROSS SECTION

92-U -238



11-158

MEV

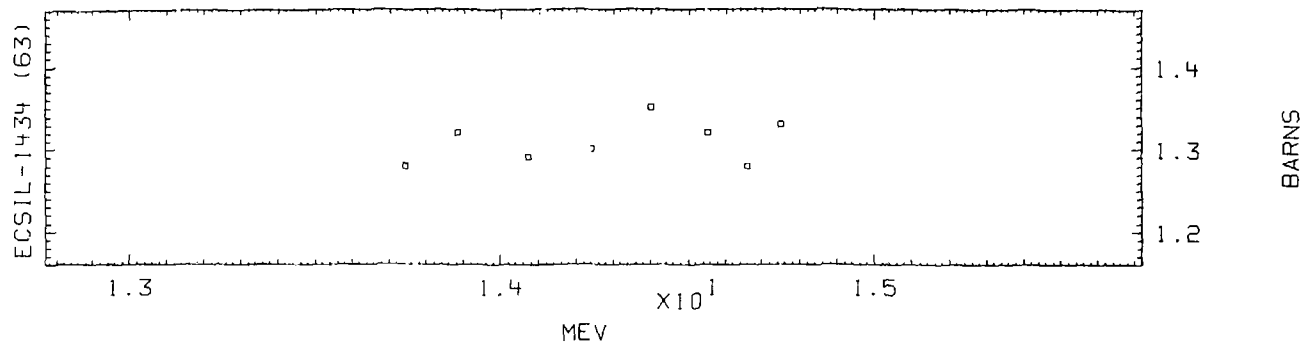
92-U -238 -13

BARNs

03/01/74

FISSION
CROSS SECTION

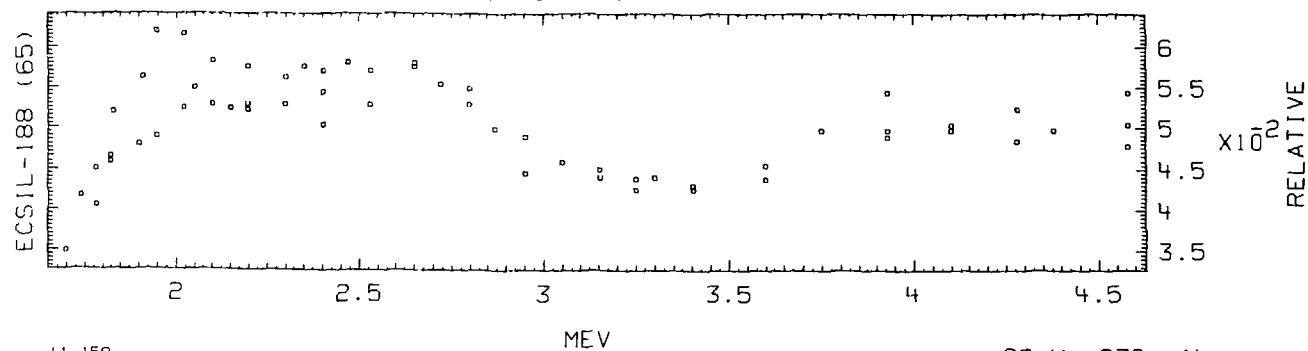
92-U -238



03/01/74

FISSION
CROSS SECTION

92-U -238



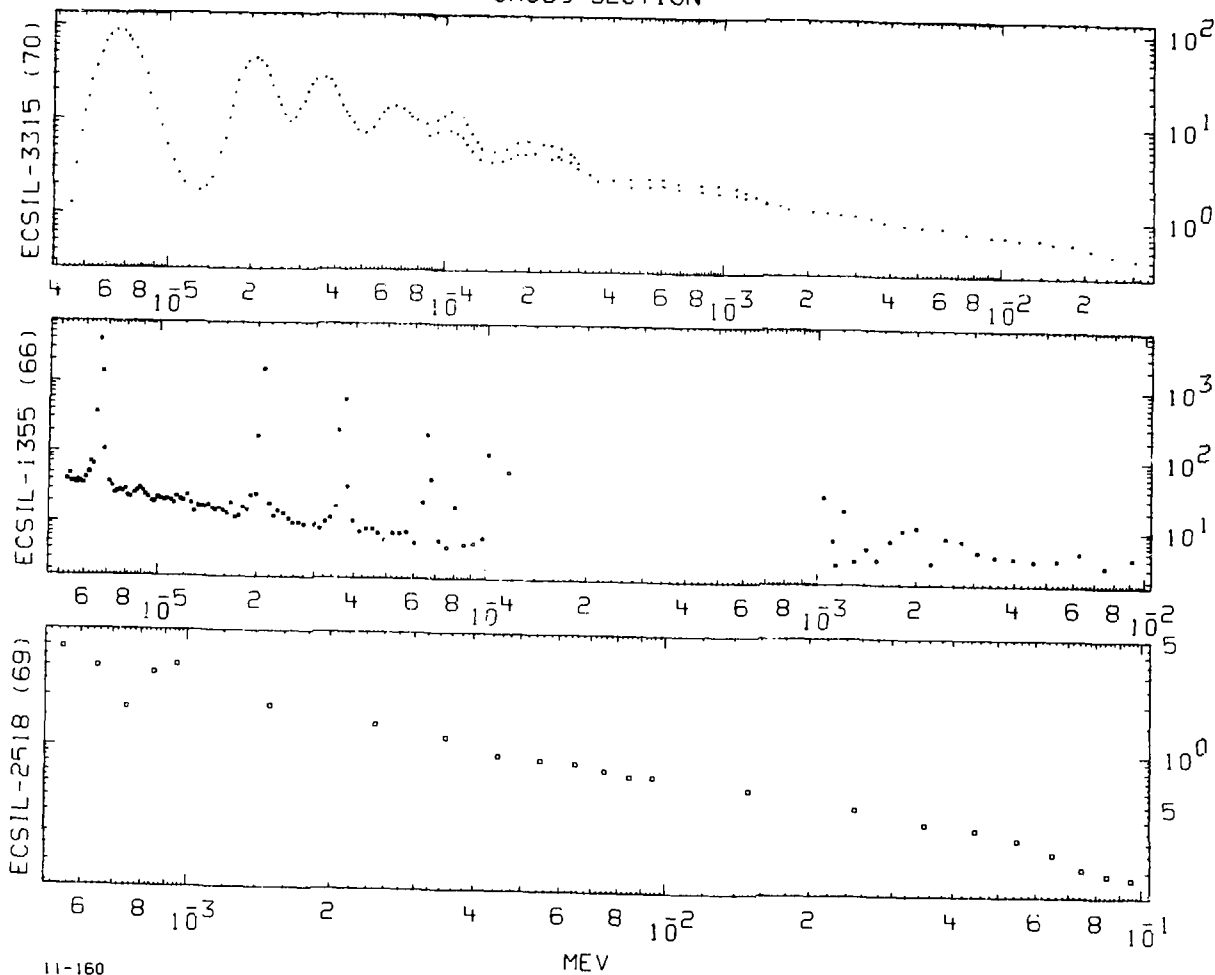
11-159

92-U -238 -14

03/01/74

N, GAMMA
CROSS SECTION

92-U -238



11-160

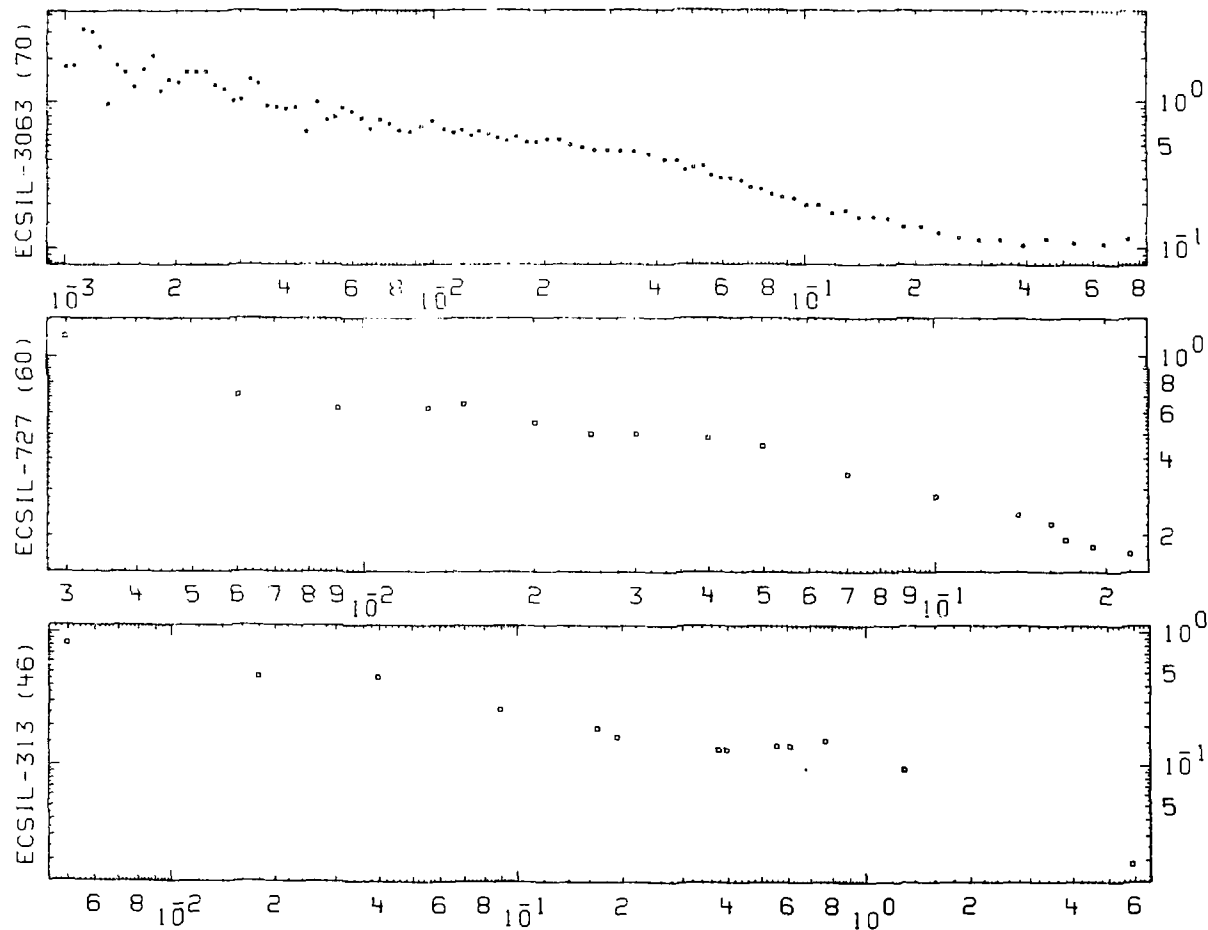
92-U -238 -15

BARNs

03/01/74

N, GAMMA
CROSS SECTION

92-U -238



11-161

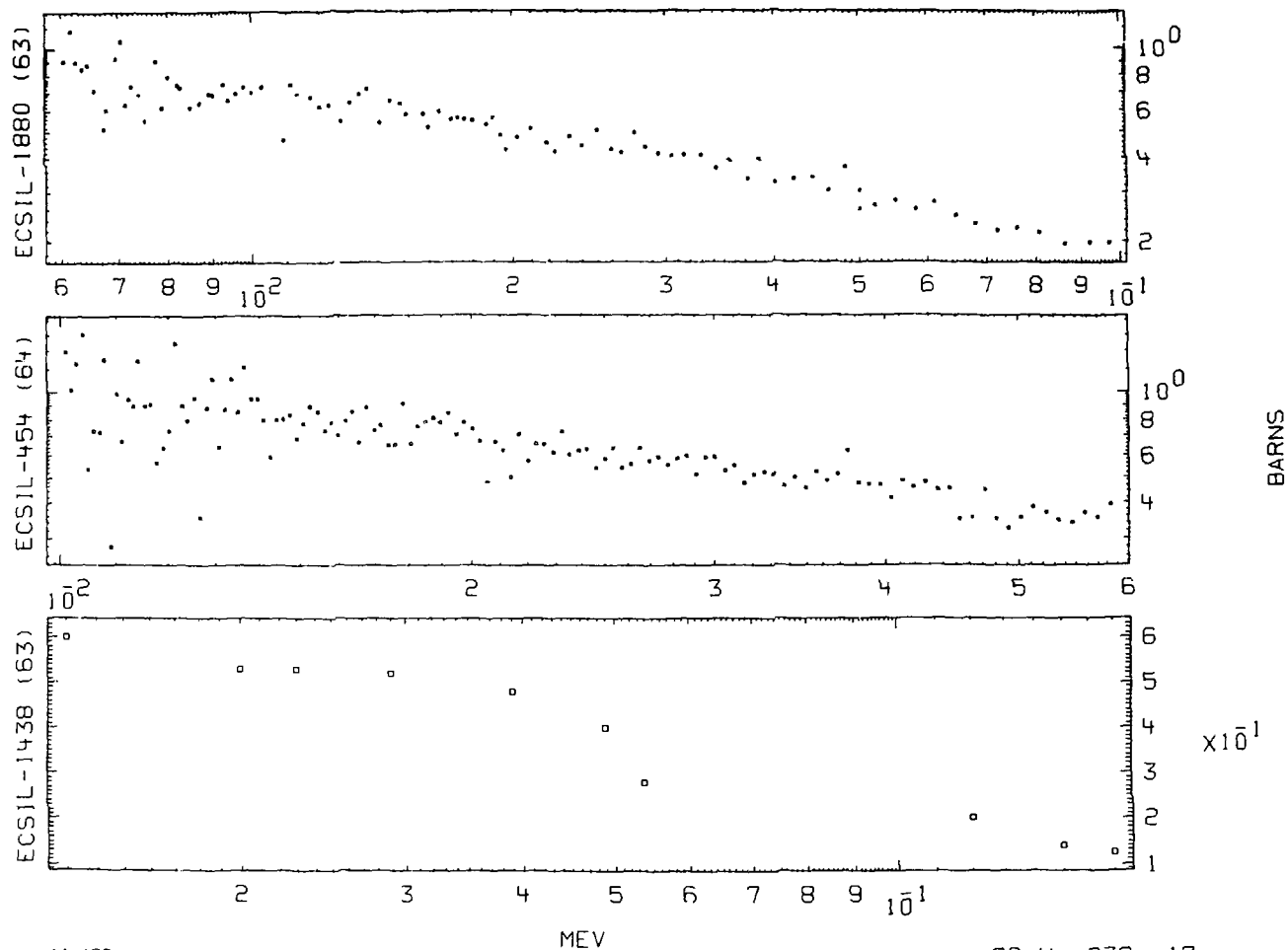
MEV

92-U -238 -16

03/01/74

N, GAMMA
CROSS SECTION

92-U -238



11-162

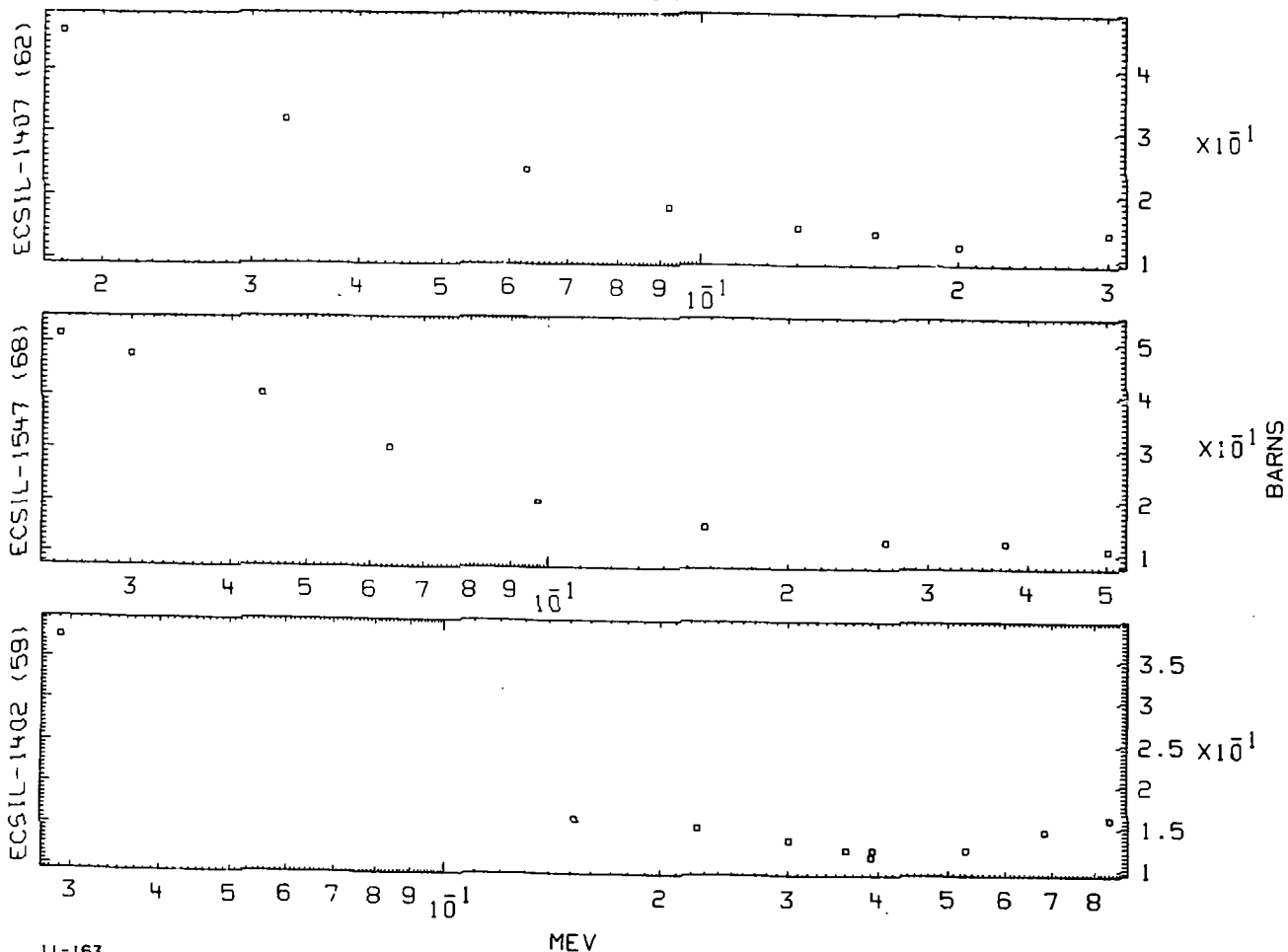
MEV

92-U -238 -17

03/01/74

N, GAMMA
CROSS SECTION

92-U -238



11-163

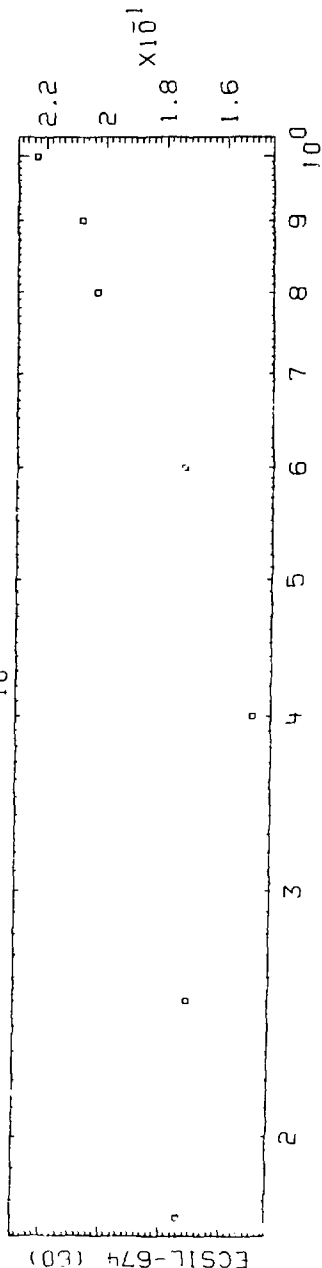
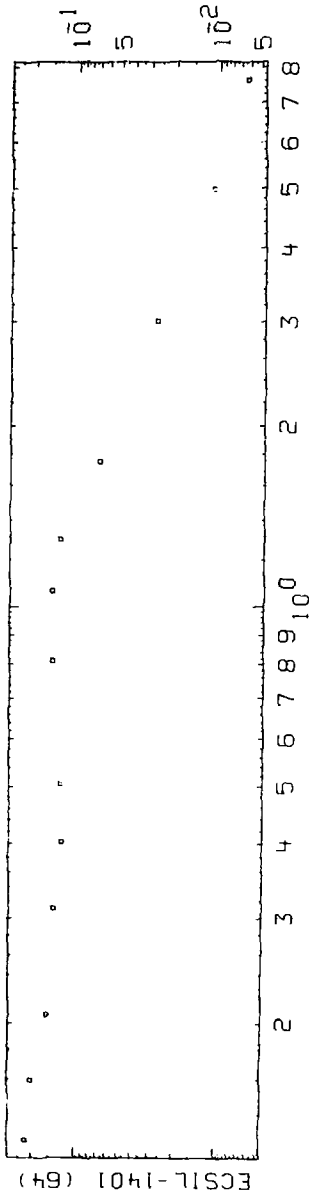
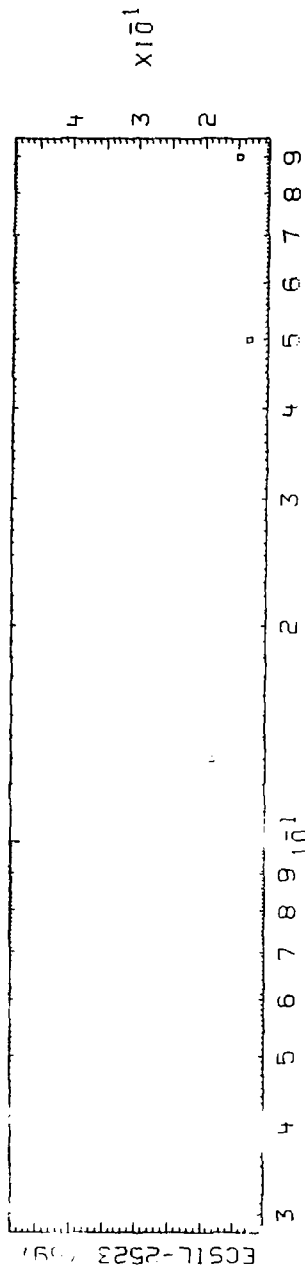
MEV

92-U -238 -18

03/01/74

N. GAMMA
CROSS SECTION

92-U -238



11-164

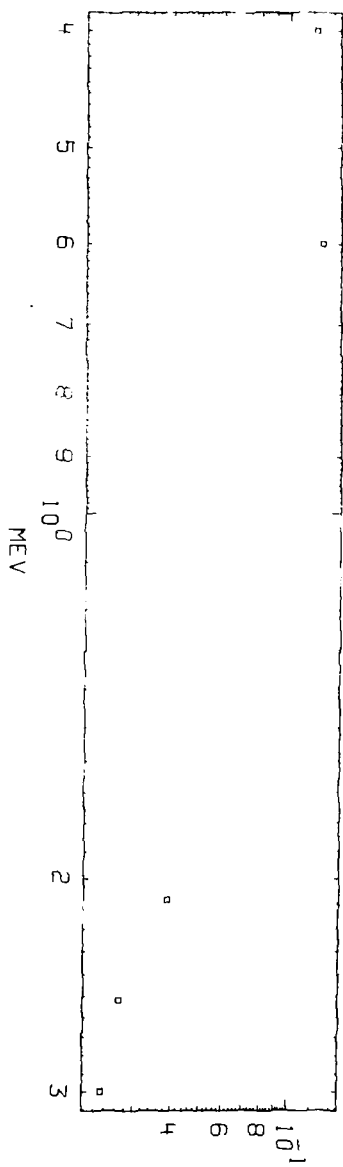
92-U -238 -19

03/01/74

N. GAMMA
CROSS SECTION

92-U -238

ECSIL-1493 (45)



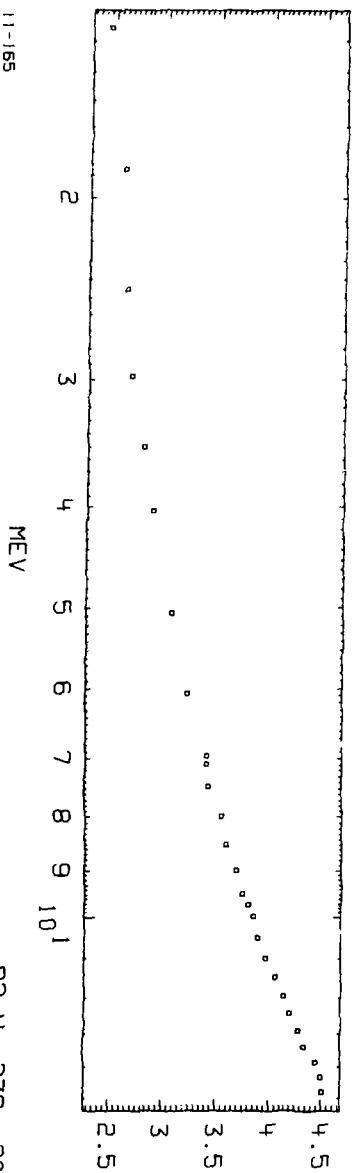
BARNs

03/01/74

NEUTRONS/FISSION
PROMPT

92-U -238

ECSIL-211 (67)



NEUTRONS/FISSION

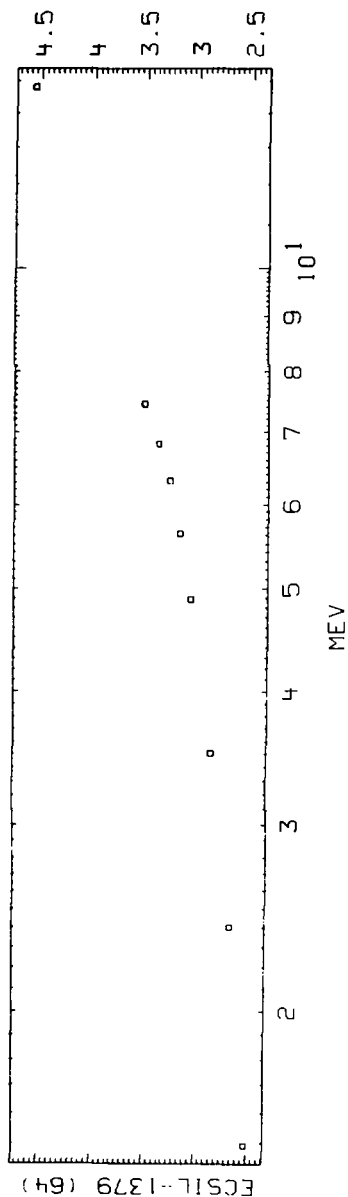
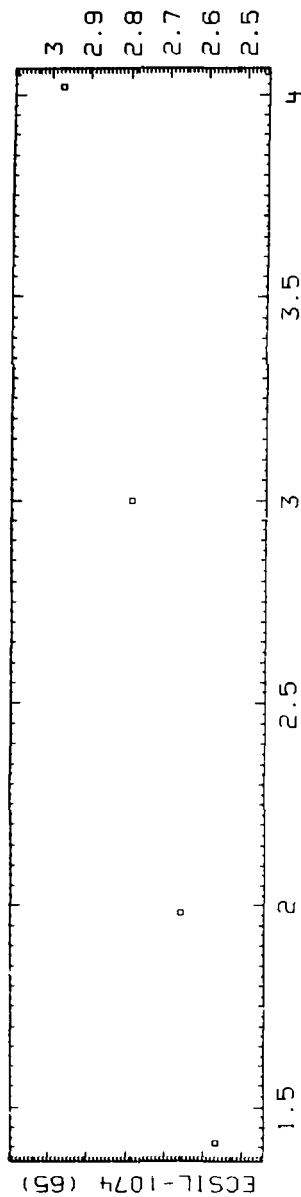
11-165

92-U -238 -20

03/01/74

NEUTRONS/FISSION
PROMPT

92-U -238

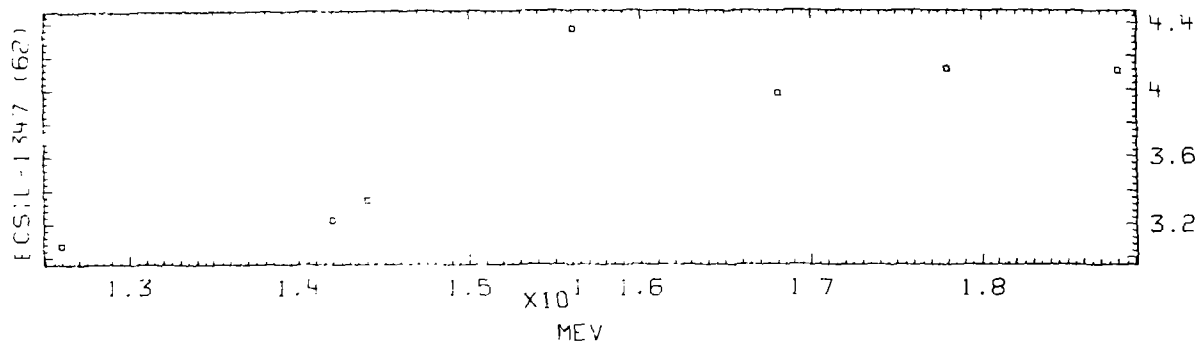


NEUTRONS/FISSION

03/01/74

NEUTRONS/NONELASTIC
EVENT

92-U -238



03/01/74

TOTAL

92-U -238

REFERENCE	ENERGY	DELTA	X-SEC	DELTA	REFERENCE	ENERGY	DELTA	X-SEC	DELTA		
	MEV	MEV	BARNs	BARNs		MEV	MEV	BARNs	BARNs		
54	6	1.1500+ 5	1.4500+ 1		61	711	1.4670+ 1	1.4000+ 1	5.8310+ 0	2.2000- 1	
67	1527	2.7000+ 0	3.0000- 2	7.4000+ 0	4.0000- 1	50	281	4.2000+ 1	1.0000+ 0	5.1210+ 0	7.0010- 2
68	2085	1.4100+ 1	1.0000- 1	5.8500+ 0	1.8000- 1	50	12	9.5000+ 1	4.9200+ 0	6.0010- 2	

03/01/74

ELASTIC

92-U -238

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 2085	1.4100+ 1	1.0000- 1	2.9600+ 0	2.3000- 1

03/01/74

FISSION

92-U -238

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
67 1500	1.1900+ 0	1.7000- 1	4.6000- 2	3.2200- 3	58 1330	1.3600+ 1		1.0900+ 0	1.0000- 1
67 1500	1.6800+ 0	1.5000- 1	4.3500- 1	2.1750- 2	48 1459	1.4000+ 1		1.1300+ 0	3.0000- 2
64 1090	2.2500+ 0		5.6000- 1	1.9600- 2	64 1090	1.4100+ 1		1.1900+ 0	4.1650- 2
64 1090	5.4000+ 0		5.5000- 1	1.9250- 2	56 771	1.4100+ 1		1.1400+ 0	3.0000- 2

03/01/74

FISSION
CROSS SECTION

92-U -238

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
69 2354	1.4600+ 1	2.0000- 1	1.1600+ 0	2.3000- 1	55 461	1.2000+ 2		1.1400+ 0	
69 2354	1.4600+ 1	2.0000- 1	1.2400+ 0	6.0000- 2	55 461	3.8000+ 2		1.0300+ 0	
58 610	1.4600+ 1		1.1300+ 0	5.0000- 2					

03/01/74

N.GAMMA

92-U -238

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
69 2156	2.5300- 8		2.6900+ 0	3.0000- 2	63	1 6.5000- 2	2.1000- 2	3.0200- 1	2.7000- 2
55 191	2.5300- 8		2.7500+ 0	1.0000- 1	61 677	6.5000- 2	2.0000- 2	3.0200- 1	3.0000- 2
55 1415	2.5300- 8		2.7300+ 0	7.0000- 2	59 526	1.9500- 1	2.7300- 2	1.2000- 1	1.7000- 2
69 2190	2.3000- 2		4.9500- 1	3.9600- 2	58 363	2.0000- 1	1.5000- 2	1.9400- 1	8.0000- 3
57 305	2.4000- 2	5.0000- 3	6.1010- 1	6.1010- 2	60 633	2.2000- 1	2.0000- 2	1.4600- 1	1.6000- 2
60 633	2.5000- 2	1.0000- 3	5.6810- 1	1.0000- 2	60 633	8.3000- 1	4.0000- 2	1.6100- 1	6.0010- 3
62 1462	3.0000- 2	8.0000- 3	5.3100- 1	6.0000- 2	58 363	2.7000+ 0		5.9300- 2	1.6000- 3
61 677	3.0000- 2	7.0010- 3	4.7300- 1	4.7000- 2	58 363	4.0000+ 0		3.3300- 2	1.2000- 3
63	1 3.0000- 2	8.0010- 3	4.7300- 1	4.3000- 2	71 3194	1.4000+ 1		8.4500- 4	2.1120- 4
62 1462	6.4000- 2	2.0000- 2	3.4000- 1	4.0000- 2	57 521	1.4500+ 1		3.3000- 3	5.0000- 4

03/01/74

PROMPT NEUTRONS/FISSION

92-U -238

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
57 1190	1.5000+ 0		2.6500+ 0	9.0000- 2	63 1126	1.4000+ 1		4.3600+ 0	3.4000- 1
61 1334	1.5800+ 0		2.5600+ 0	3.0000- 2	56 1321	1.4100+ 1		4.1300+ 0	2.5000- 1
61 1079	2.3000+ 0		2.7200+ 0	8.0000- 2	58 1330	1.4200+ 1		4.5500+ 0	1.5000- 1
56 1321	2.5000+ 0		2.3500+ 0	1.8000- 1	58 1134	1.4200+ 1		4.4400+ 0	2.0000- 1
61 1138	3.6000+ 0	3.0000- 1	2.7900+ 0	9.0000- 2	61 1068	1.4200+ 1		4.4400+ 0	1.2000- 1
61 1079	3.7500+ 0		3.0200+ 0	1.0000- 1	60 1325	1.4300+ 1		4.2800+ 0	3.0000- 1
55 1383	4.5000+ 0		3.1000+ 0	4.0000- 1	61 1138	1.4900+ 1	3.0000- 1	4.7500+ 0	1.2000- 1
58 1324	1.4000+ 1		4.4600+ 0	3.2000- 1					

03/01/74

NEUTRONS/FISSION
DELAYED

92-U -238

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
1 55 1341	2.0000+ 0	1.0000+ 0	3.4080- 2	3.3500- 3
59 1425	2.4000+ 0		4.1000- 2	2.0000- 3
69 1533	3.1000+ 0	2.0000- 1	4.9000- 2	5.0000- 3
59 1425	3.3000+ 0		3.9000- 2	3.0000- 3
68 2357	1.4000+ 1		2.2000- 2	6.0000- 3
60 1410	1.4000+ 1		6.6000- 2	1.7000- 2
66 1542	1.4700+ 1		6.5000- 2	
69 1533	1.4900+ 1	5.0000- 1	2.8600- 2	2.5000- 3
59 1425	1.5000+ 1		7.4000- 2	4.0000- 3

03/01/74

NEUTRONS/NONELASTIC EVENT

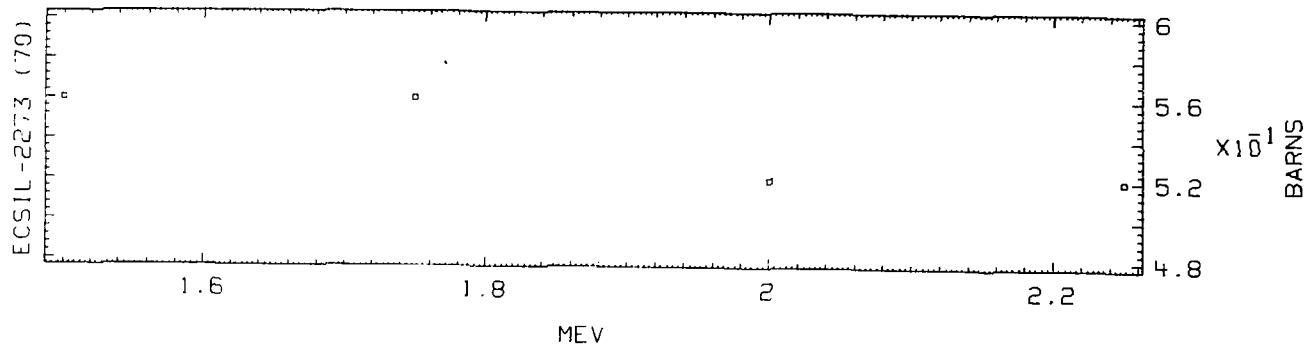
92-U -238

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
68 1324	1.4000+ 1		2.9900+ 0	1.5000- 1
68 2085	1.4100+ 1	1.0000- 1	2.9300+ 0	3.5000- 1
61 1270	1.4100+ 1	7.0000- 1	3.3000+ 0	1.5000- 1

03/01/74

FISSION
CROSS SECTION

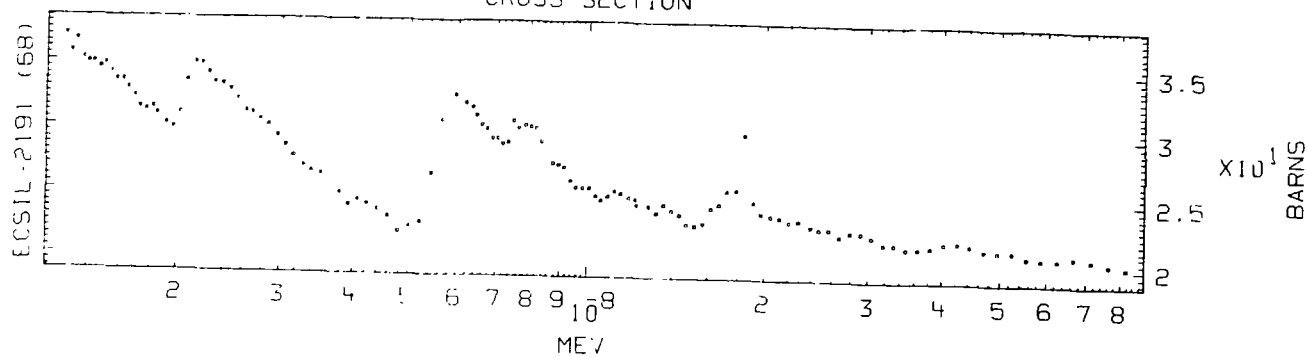
92-U -239



03 01 74

TOTAL CROSS SECTION

U02



03/01/74

FISSION
CROSS SECTION

93-NP-236

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
61 1088	2.5000- 8		2.5000+ 3	8.0000+ 1

03/01/74

PROMPT NEUTRONS/FISSION

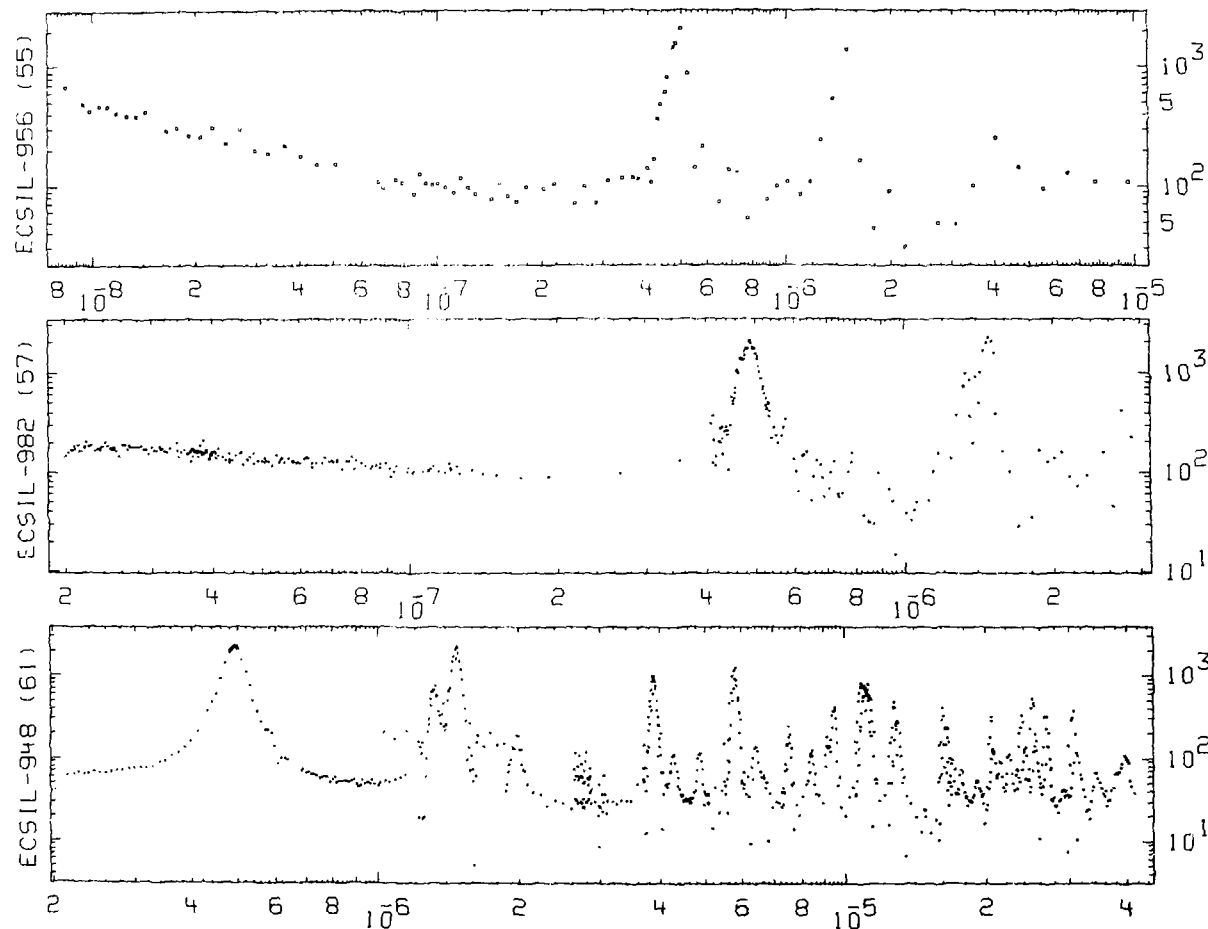
93-NP-236

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
61 1088	2.5000- 8		4.1200+ 0	1.4000- 1

03/01/74

TOTAL
CROSS SECTION

93-NP-237



11-173

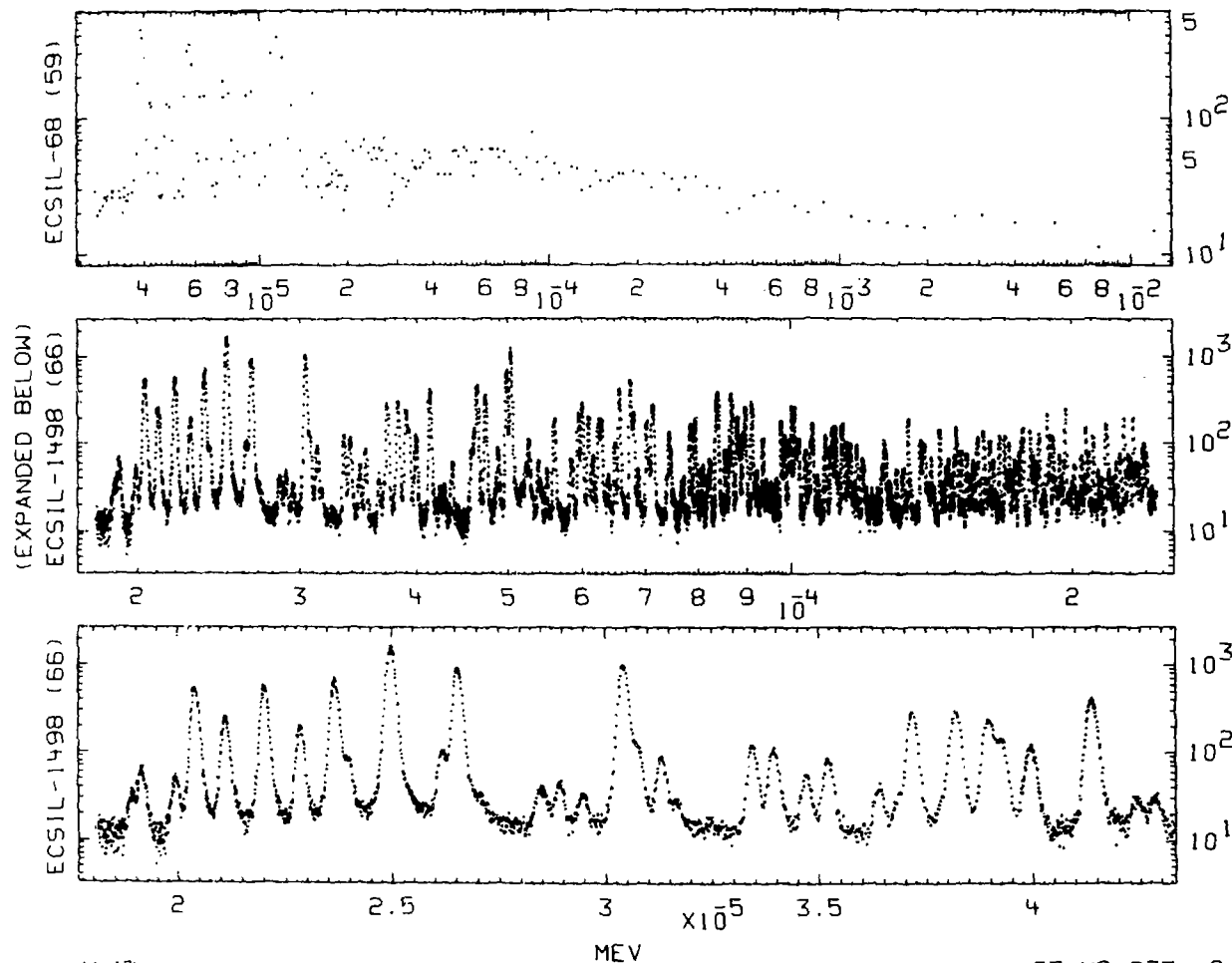
MEV

93-NP-237 -1

03/01/74

TOTAL
CROSS SECTION

93-NP-237



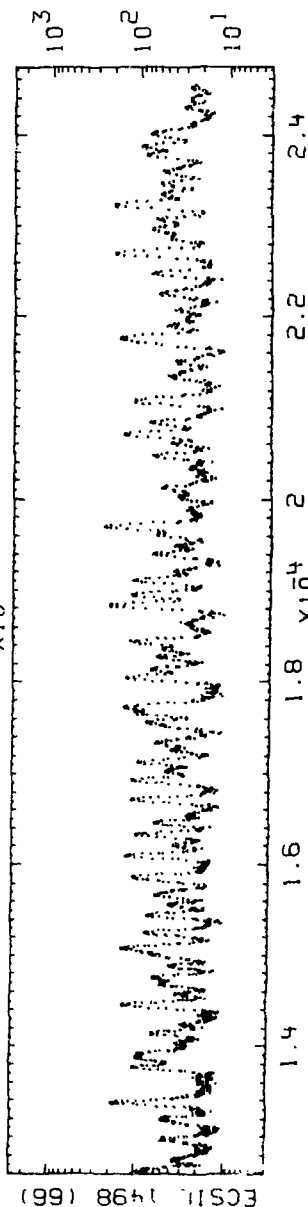
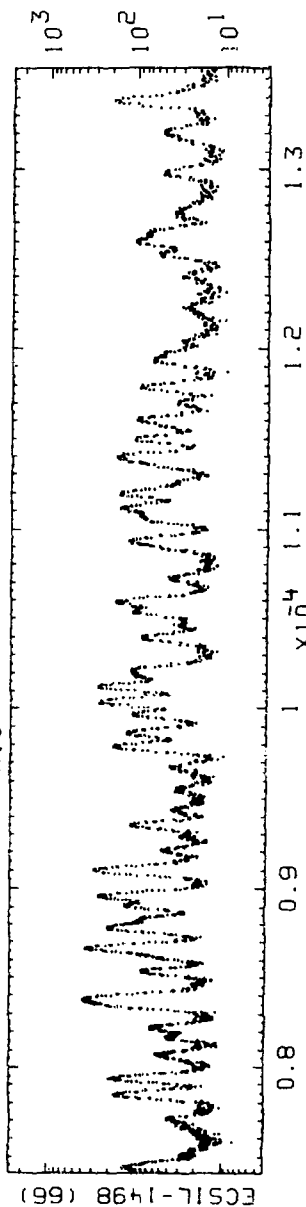
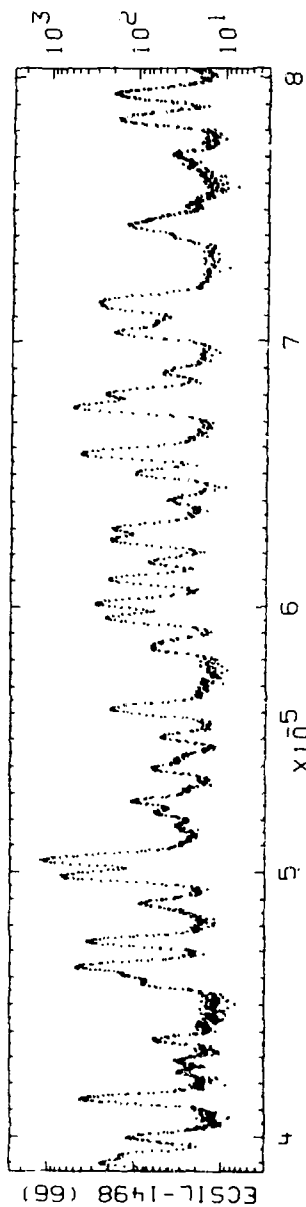
11-174

93-NP-237 -2

03/01/74

93-NP-237

TOTAL
CROSS SECTION



BARNs

11-175

MEV

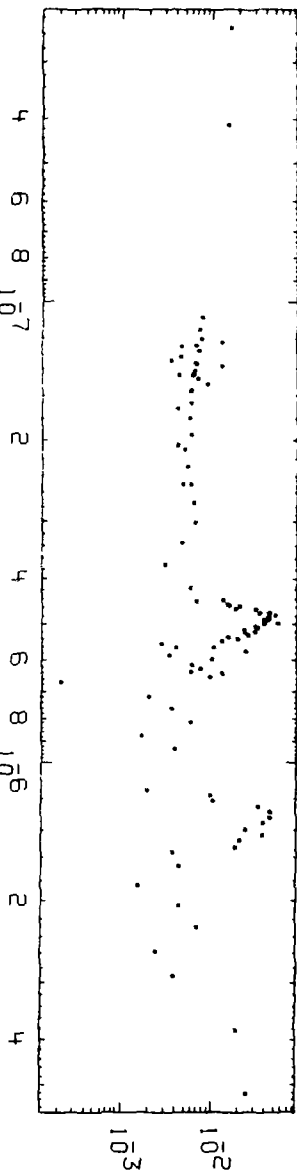
93-NP-237 -3

03/01/74

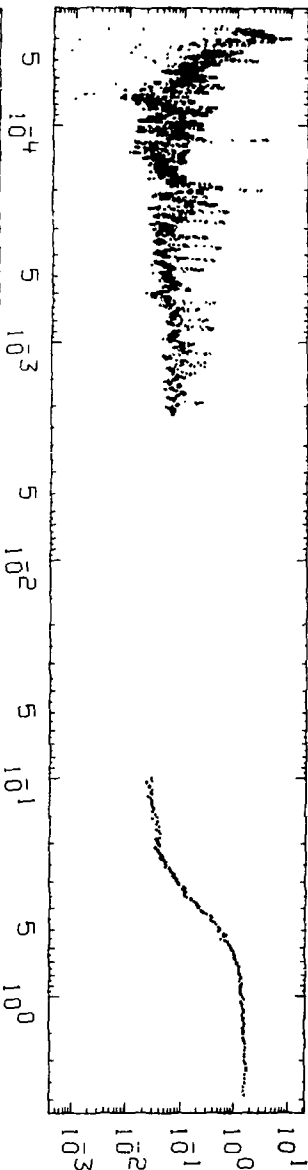
FISSION
CROSS SECTION

93-NP-237

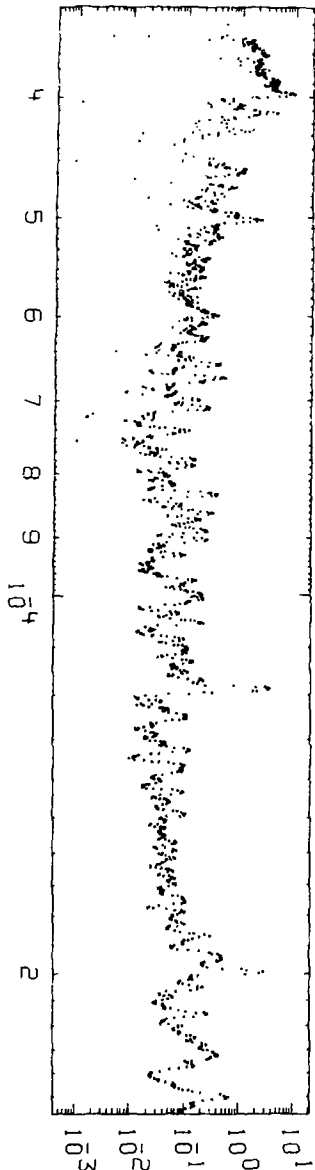
ECSIL-241 (59)



(EXPANDED BELOW)
ECSIL-943 (70)



ECSIL-943 (70)



BARNs

11-176

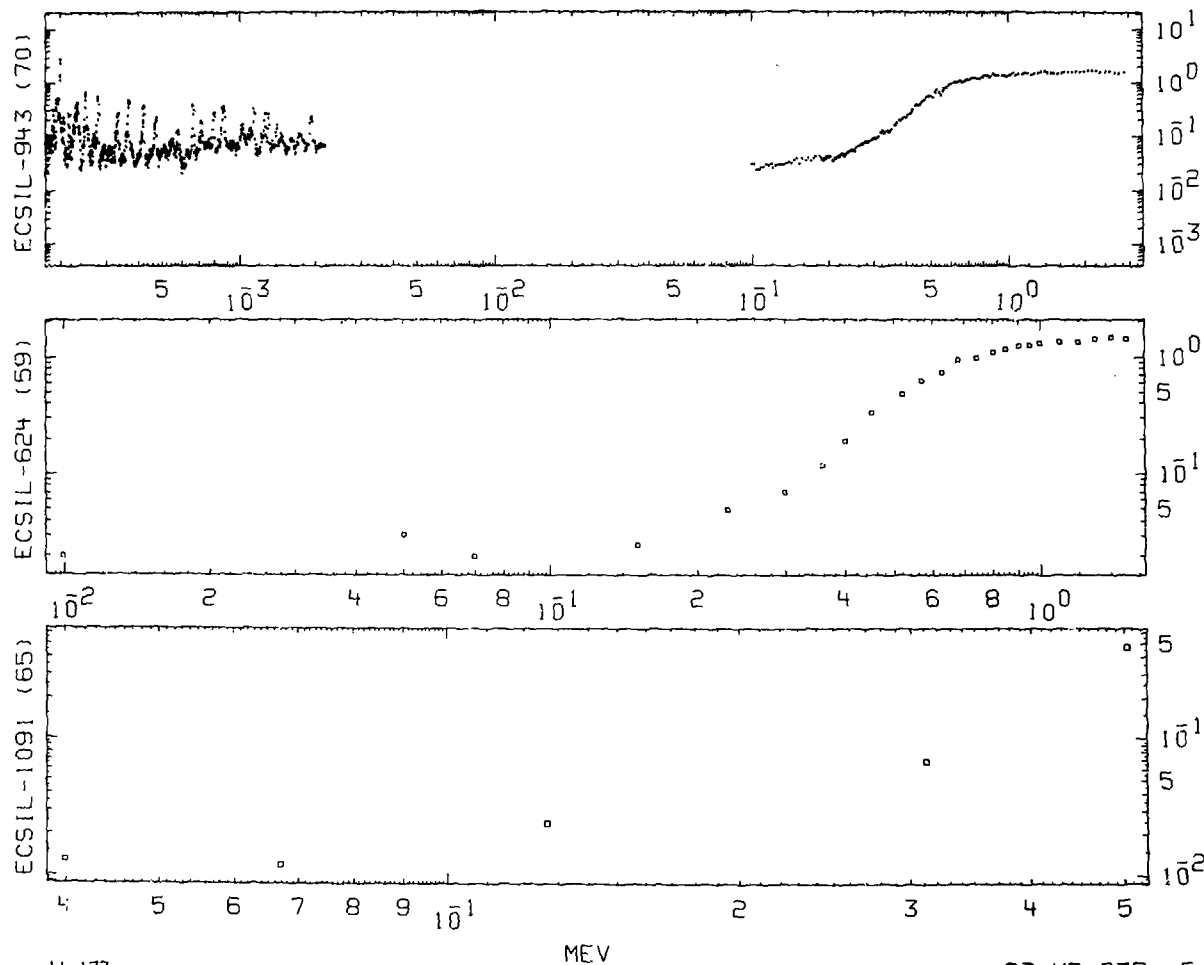
MEV

93-NP-237 -4

03/01/74

FISSION
CROSS SECTION

93-NP-237

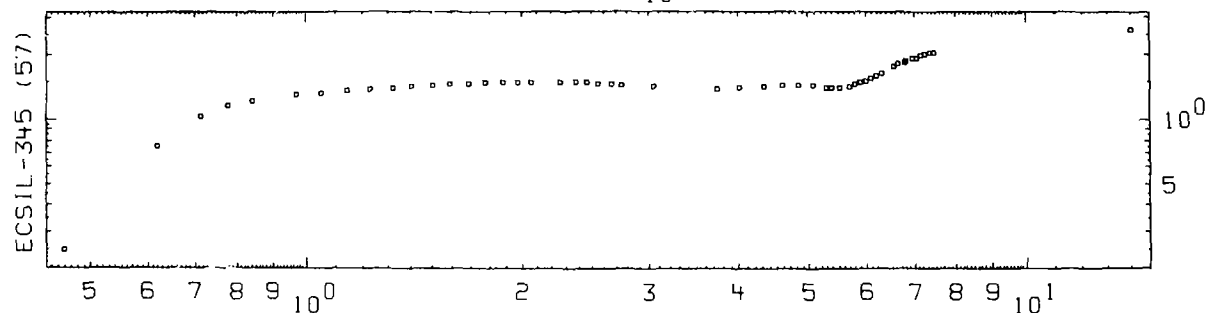
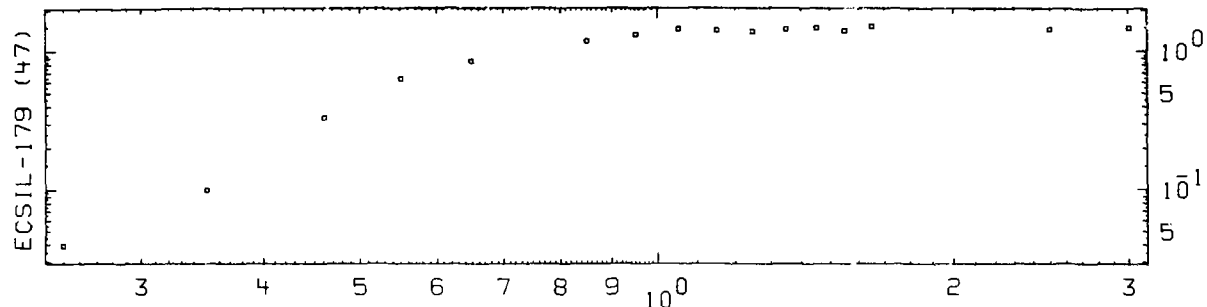


BARN'S

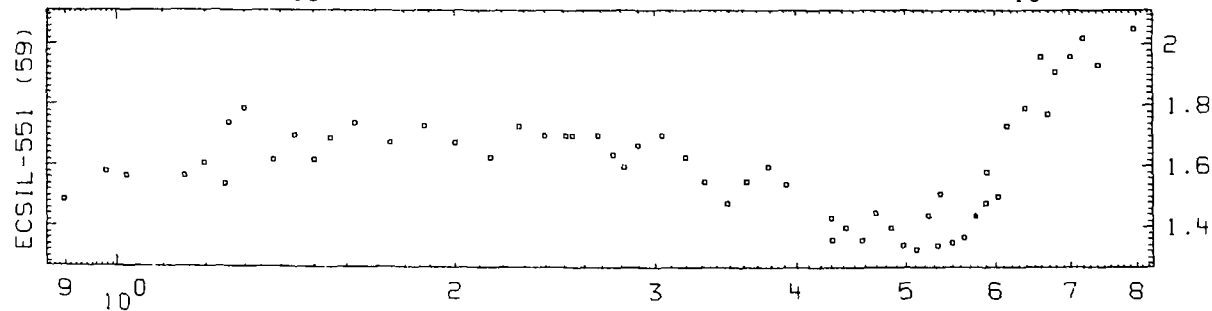
03/01/74

FISSION
CROSS SECTION

93-NP-237



BARNs



MEV

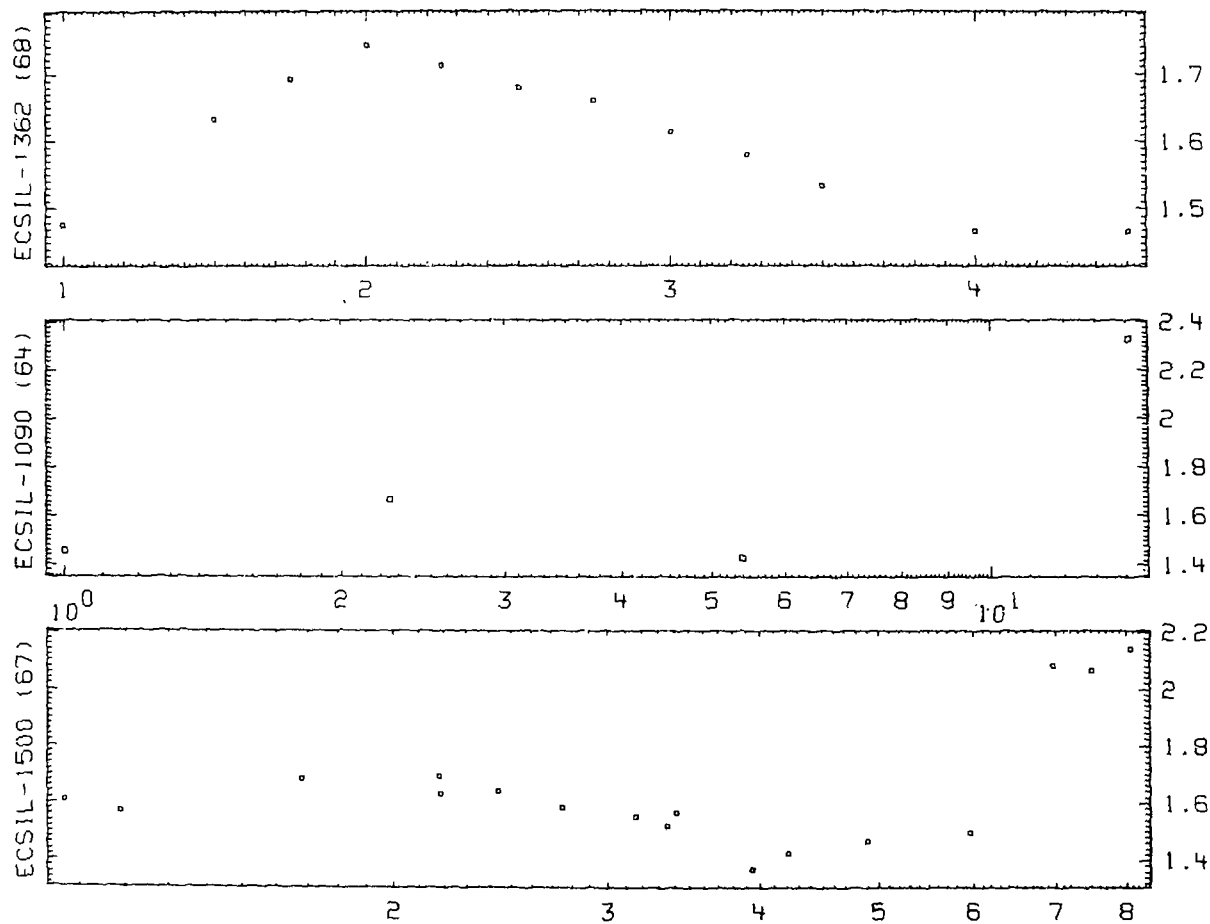
11-178

93-NP-237 -6

03/01/74

FISSION
CROSS SECTION

93-NP-237



11-179

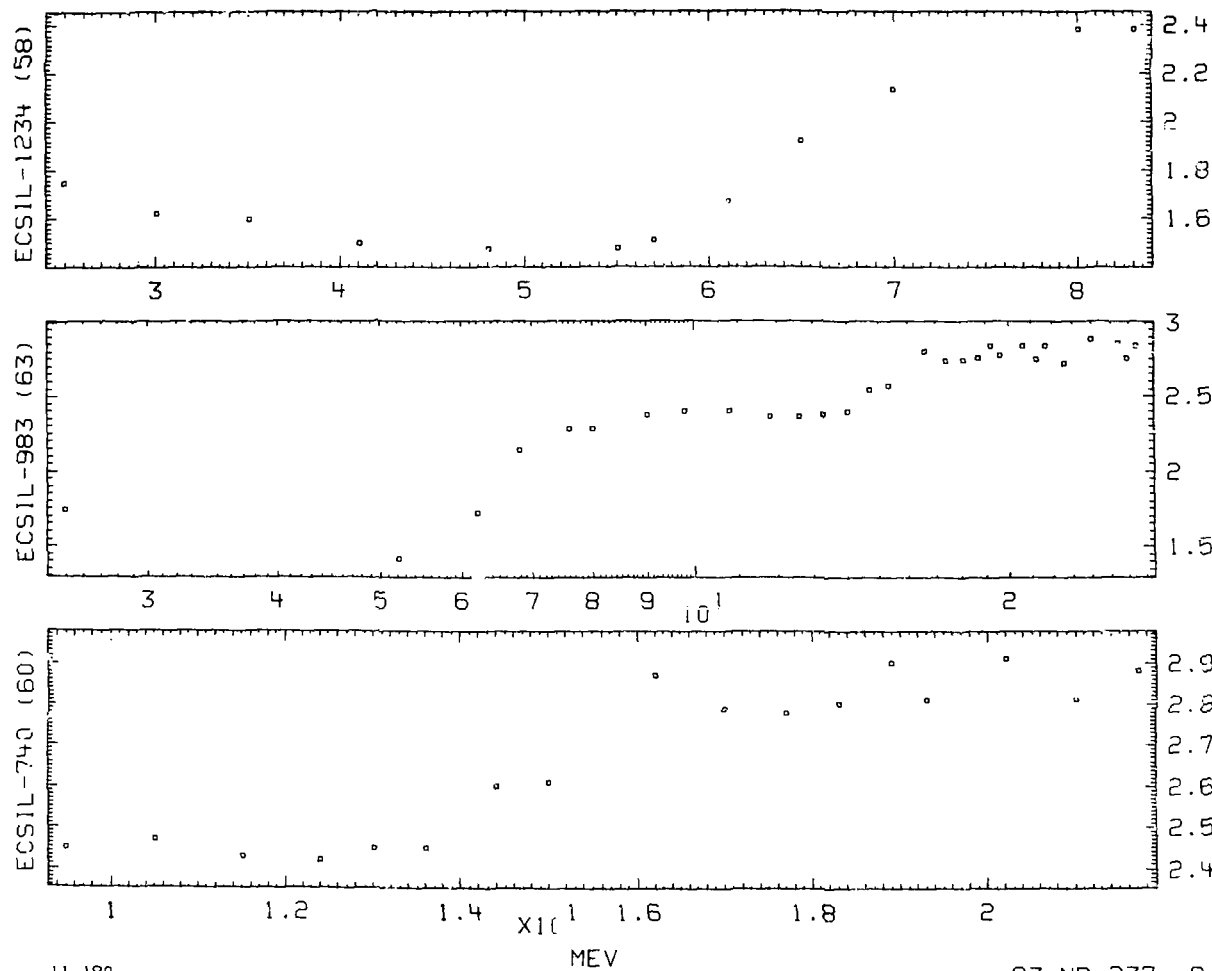
MEV

93-NP-237 -7

03/01/74

FISSION
CROSS SECTION

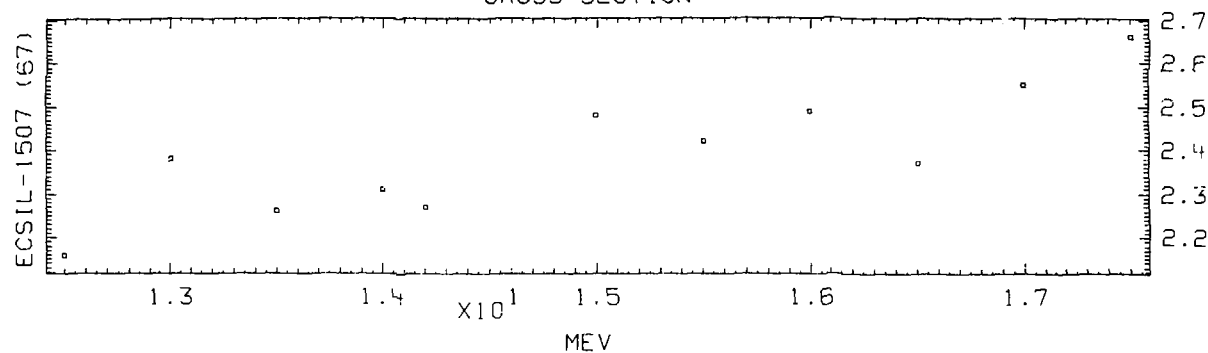
93-NP-237



03/01/74

FISSION
CROSS SECTION

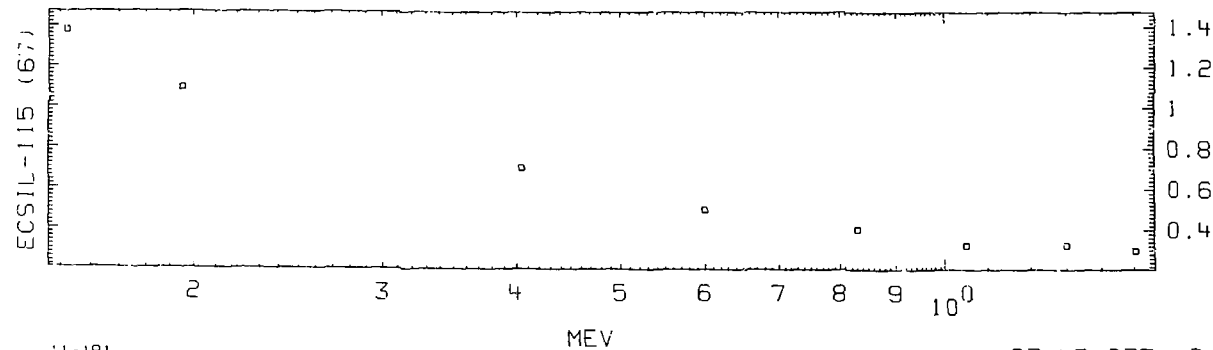
93-NP-237



03/01/74

N, GAMMA
CROSS SECTION

93-NP-237



11-181

93-NP-237 -9

03/01/74

FISSION
CROSS SECTION

93-NP-237

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
65 1072	2.4000- 2		1.1000- 2	2.0000- 3
58 528	1.4600+ 1		2.4000+ 0	2.0000- 1

03/01/74

N, GAMMA

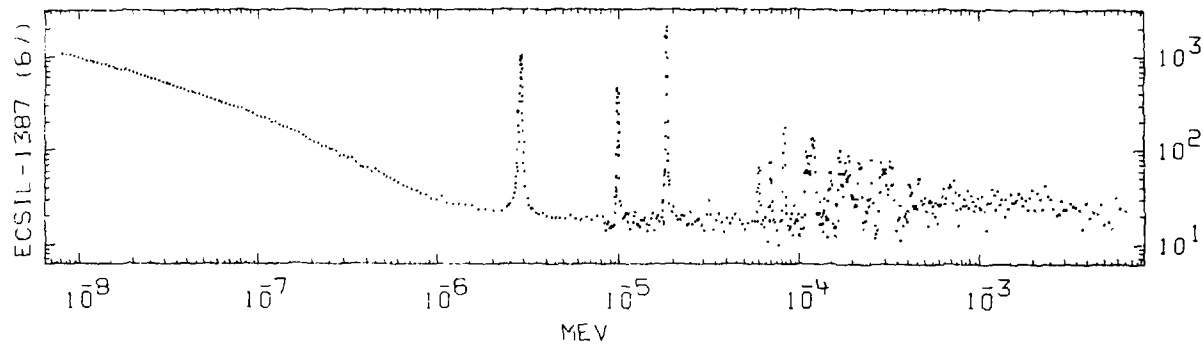
93-NP-237

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
56 166	2.5300- 8		1.7200+ 2	7.0600+ 0

03/01/74

TOTAL
CROSS SECTION

94-PU-238

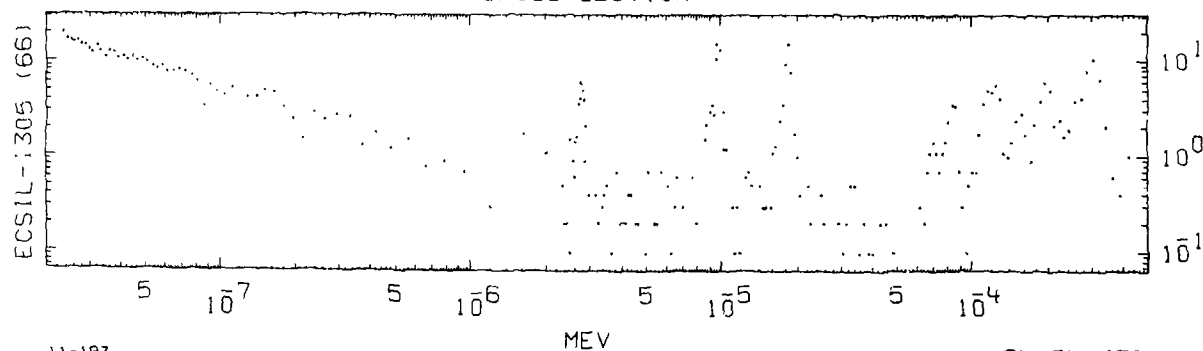


BARNs

03/01/74

FISSION
CROSS SECTION

94-PU-238



BARNs

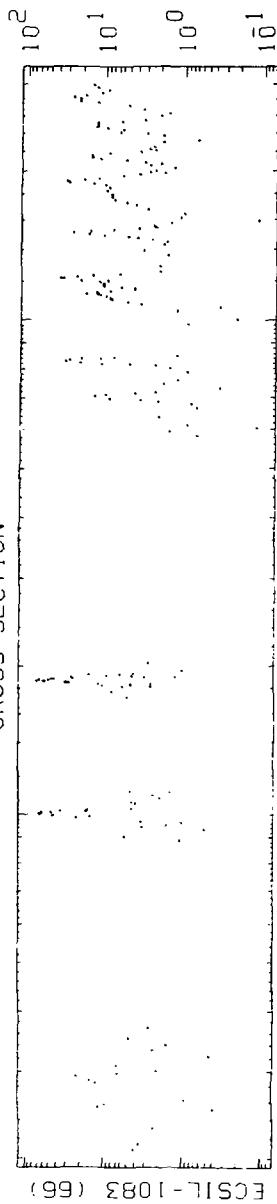
11-183

94-PU-238 -1

03/01/74

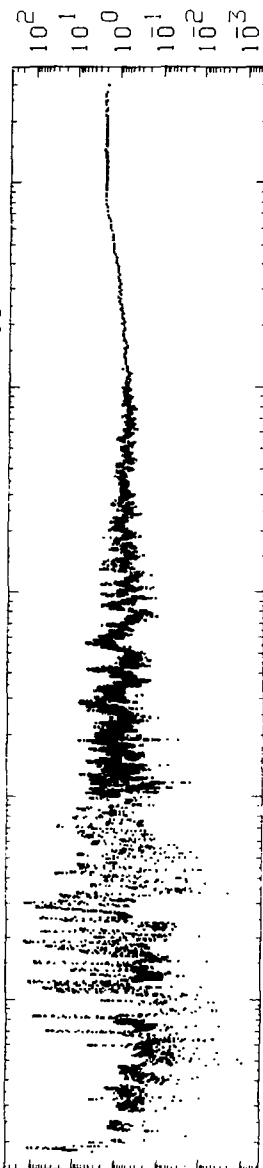
FISSION
CROSS SECTION

94-PU-238

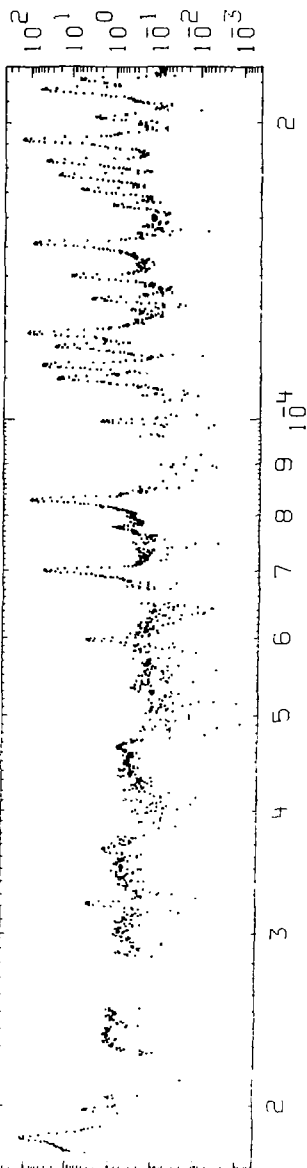


(EXPANDED BELOW)

EC51L-2394 (69)



EC51L-2394 (69)



MEV

11-184

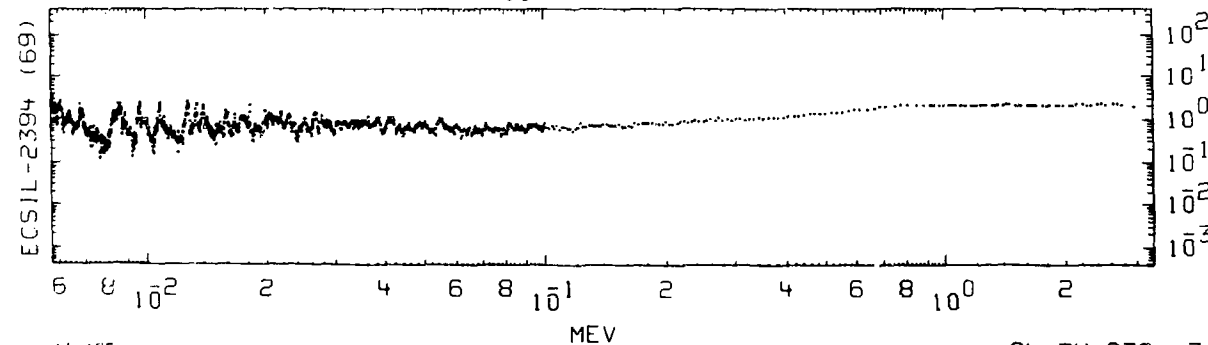
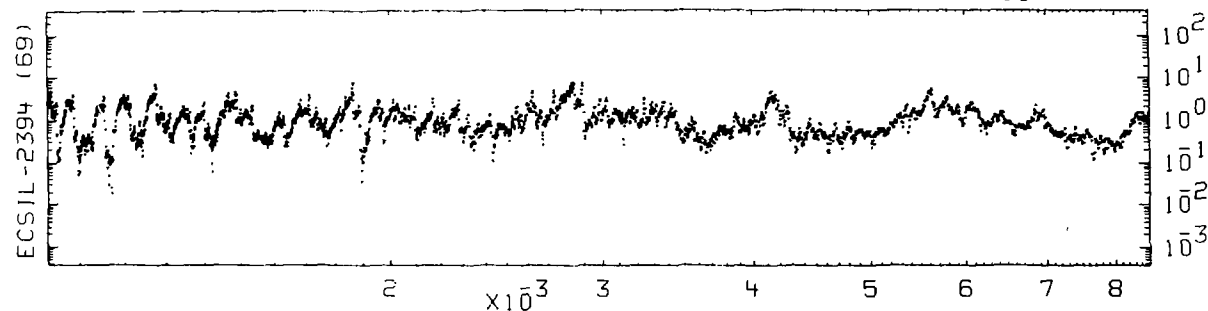
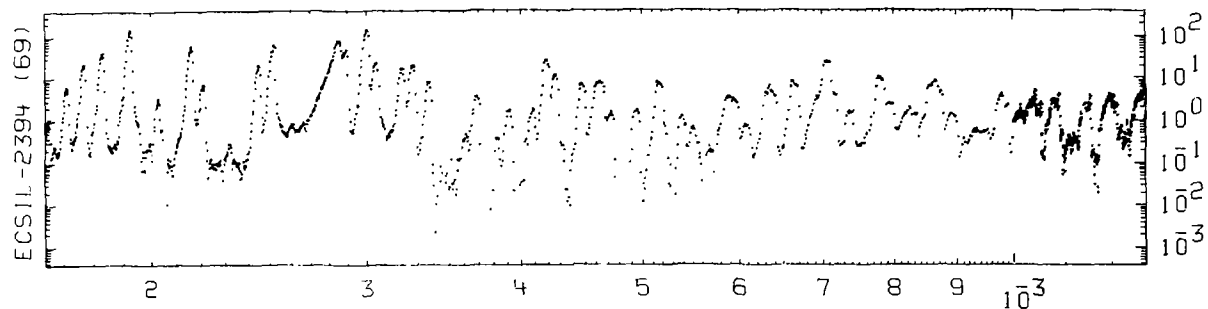
94-PU-238 -2

BARNs

03/01/74

FISSION
CROSS SECTION

94-PU-238



BARNs

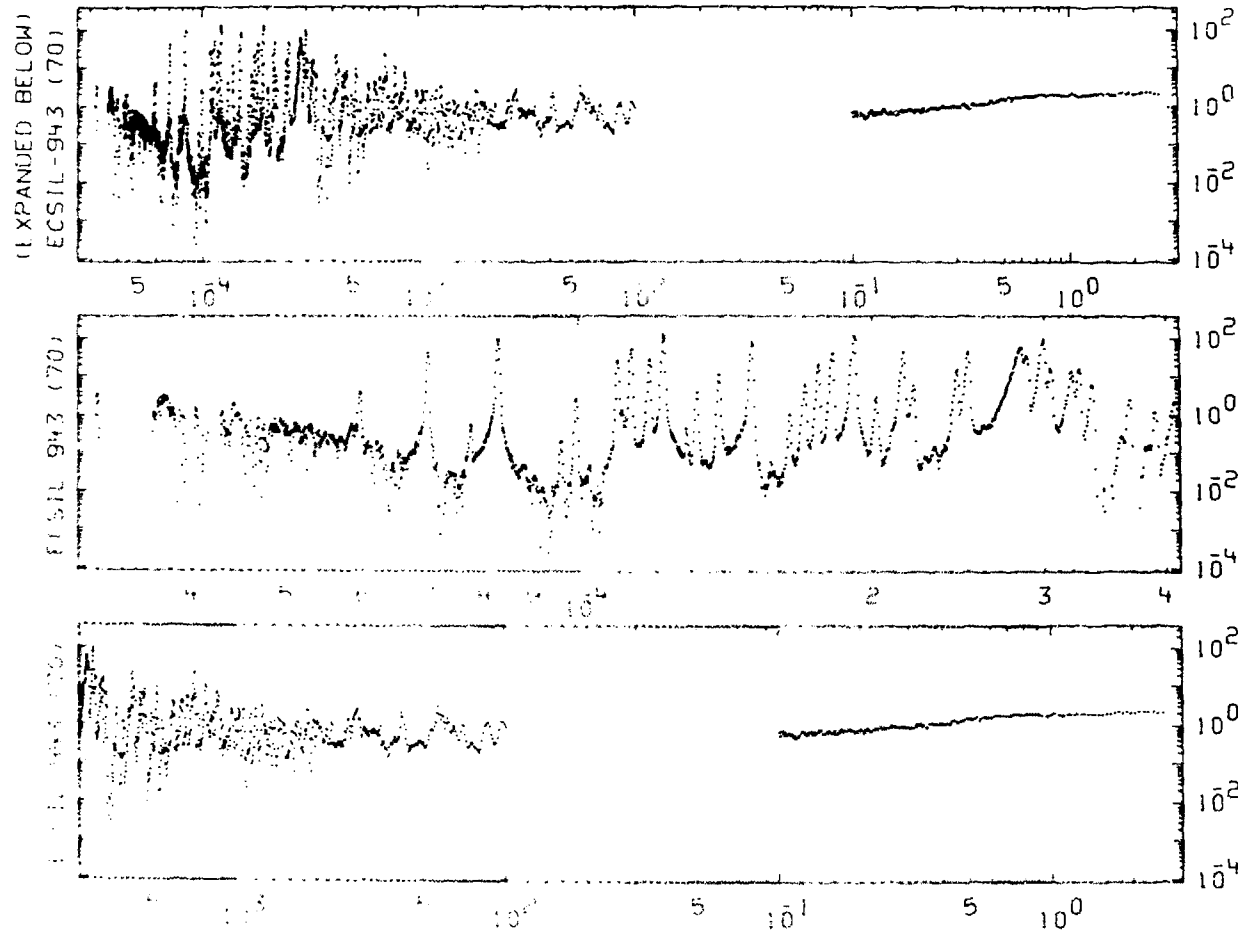
11-165

94-PU-238 -3

03/01/74

FISSION CROSS SECTION

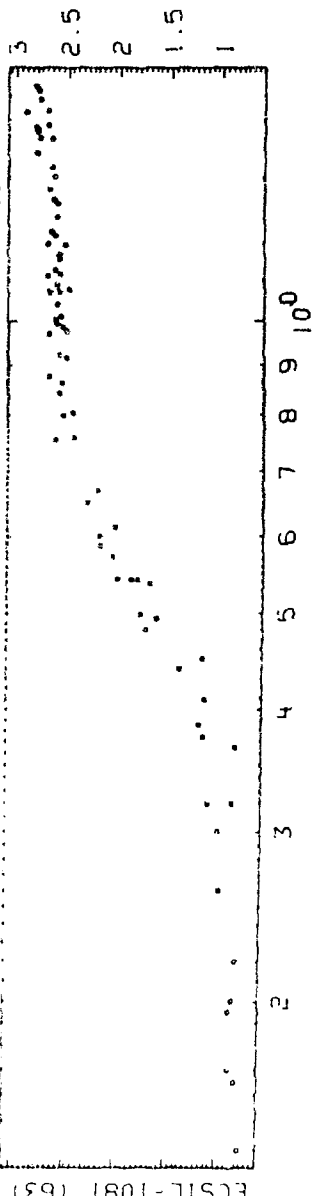
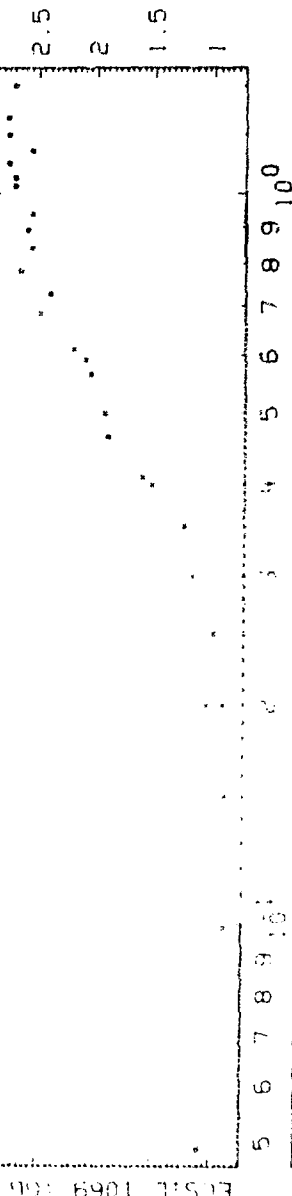
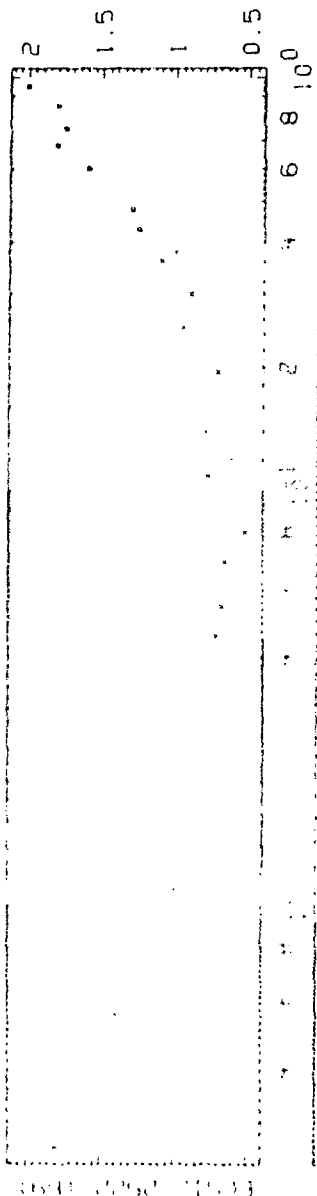
94-PU-238



11-187

FISSION CROSS SECTION

94-PU-238



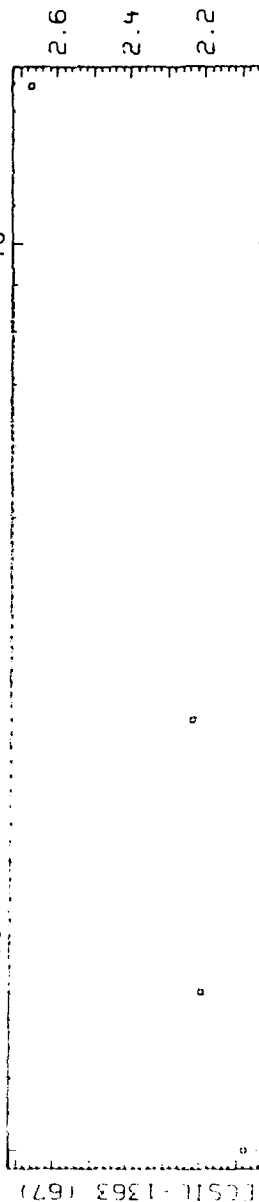
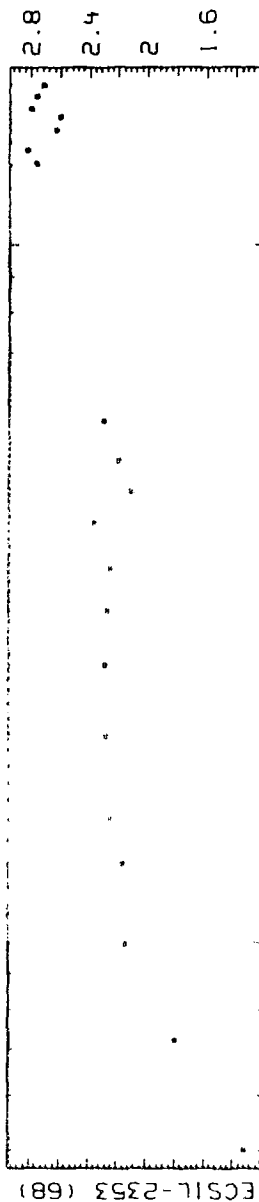
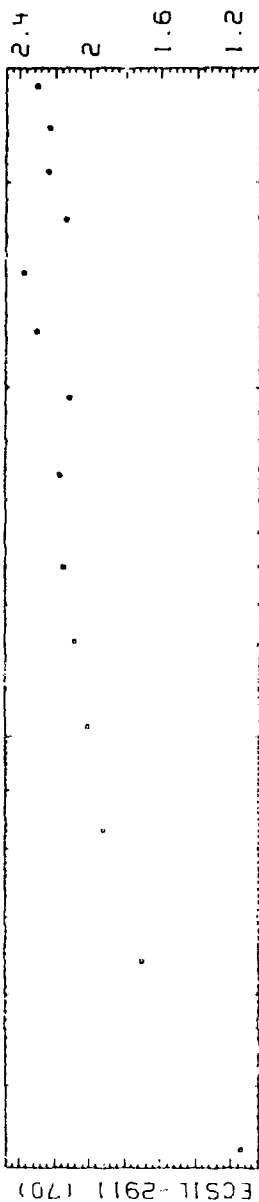
11-187

94-PU-238 -5

03/01/74

94-PU-238

FISSION CROSS SECTION



MEV

11-100

94-PU-238 -6

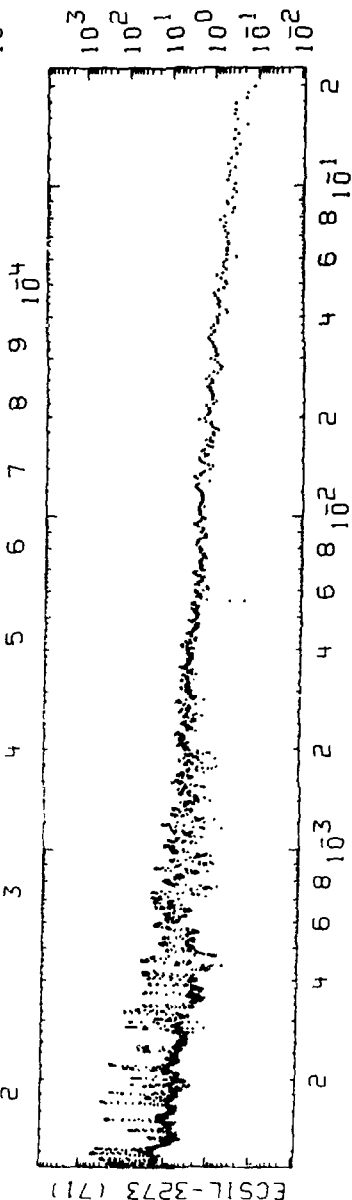
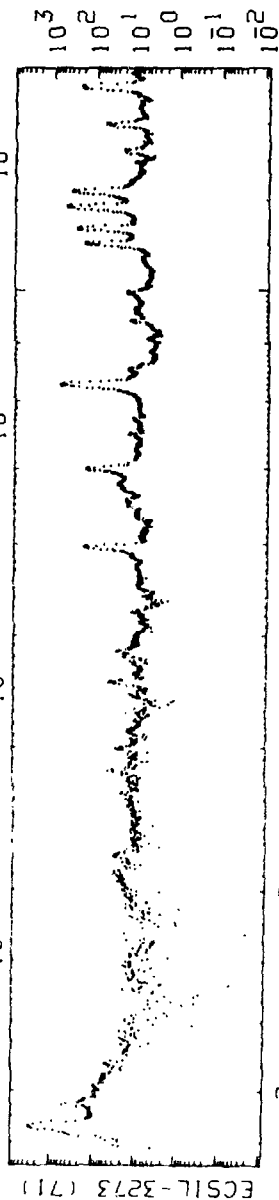
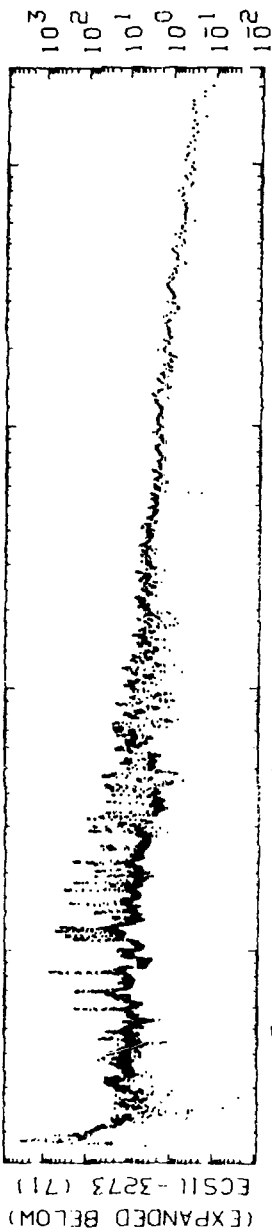
BARNs

03/01/74

N. GAMMA

94-PU-238

CROSS SECTION



MEV

11-100

94-PU-238 -7

BARNS

03/01/74

94-PU-238

TOTAL
CROSS SECTION

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
62 1210	2.5300 - 8		6.1500 + 2	1.0000 + 1

03/01/74

94-PU-238

FISSION

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
58 1163	2.5300 - 8		1.7100 + 1	4.0000 - 1
67 1519	1.4500 + 1		2.7300 + 0	1.3000 - 1

03/01/74

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N, GAMMA

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
47 1348	2.5000 - 8		4.0300 + 2	8.0000 + 0

03/01/74

94-PU-238

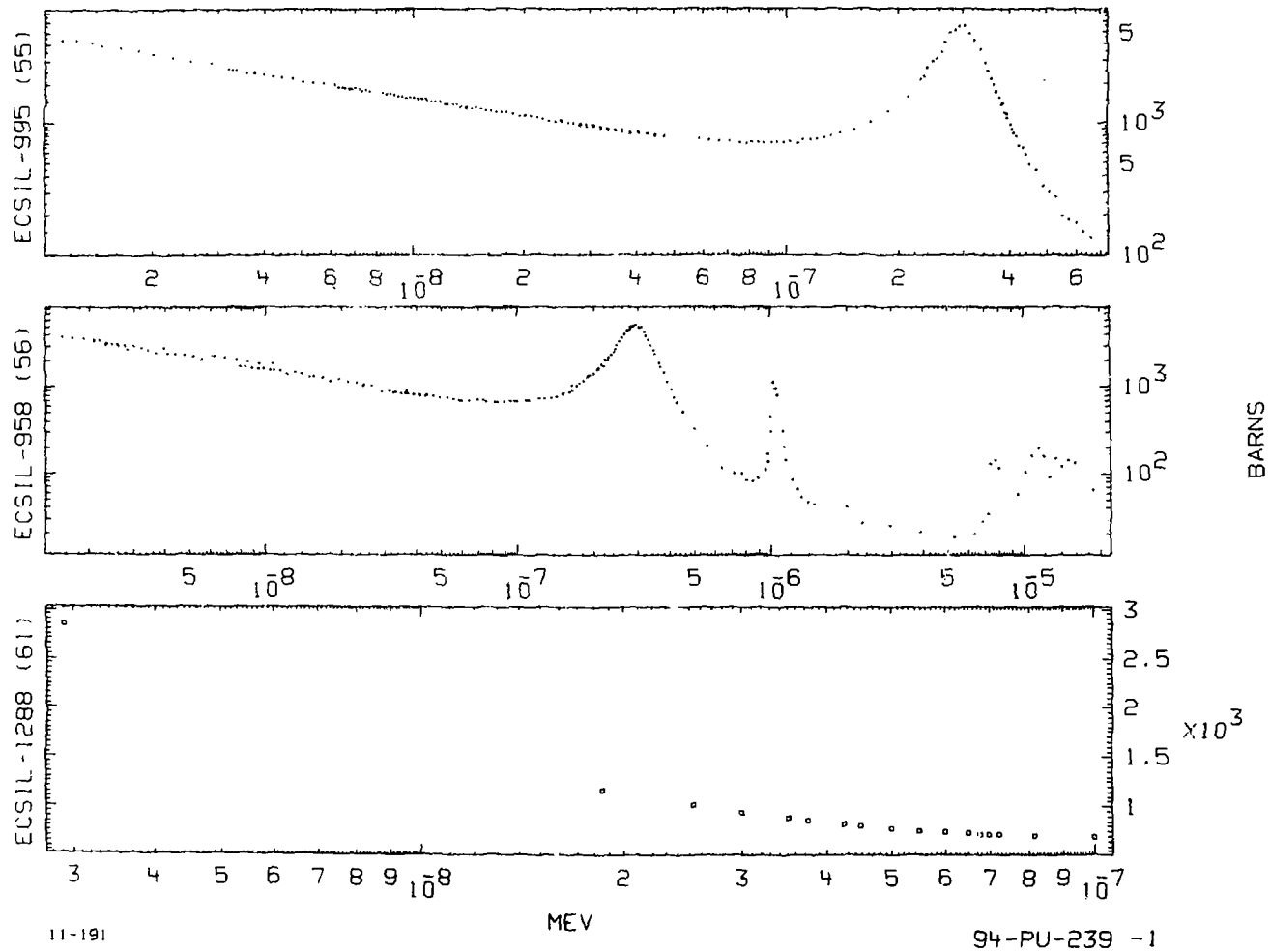
PROMPT NEUTRONS/FISSION

REFERENCE	ENERGY MEV	DELTA MEV	NJ-BAR	DELTA
69 1912	2.5300 - 8		2.8950 + 0	2.7000 - 2

03/01/74

TOTAL
CROSS SECTION

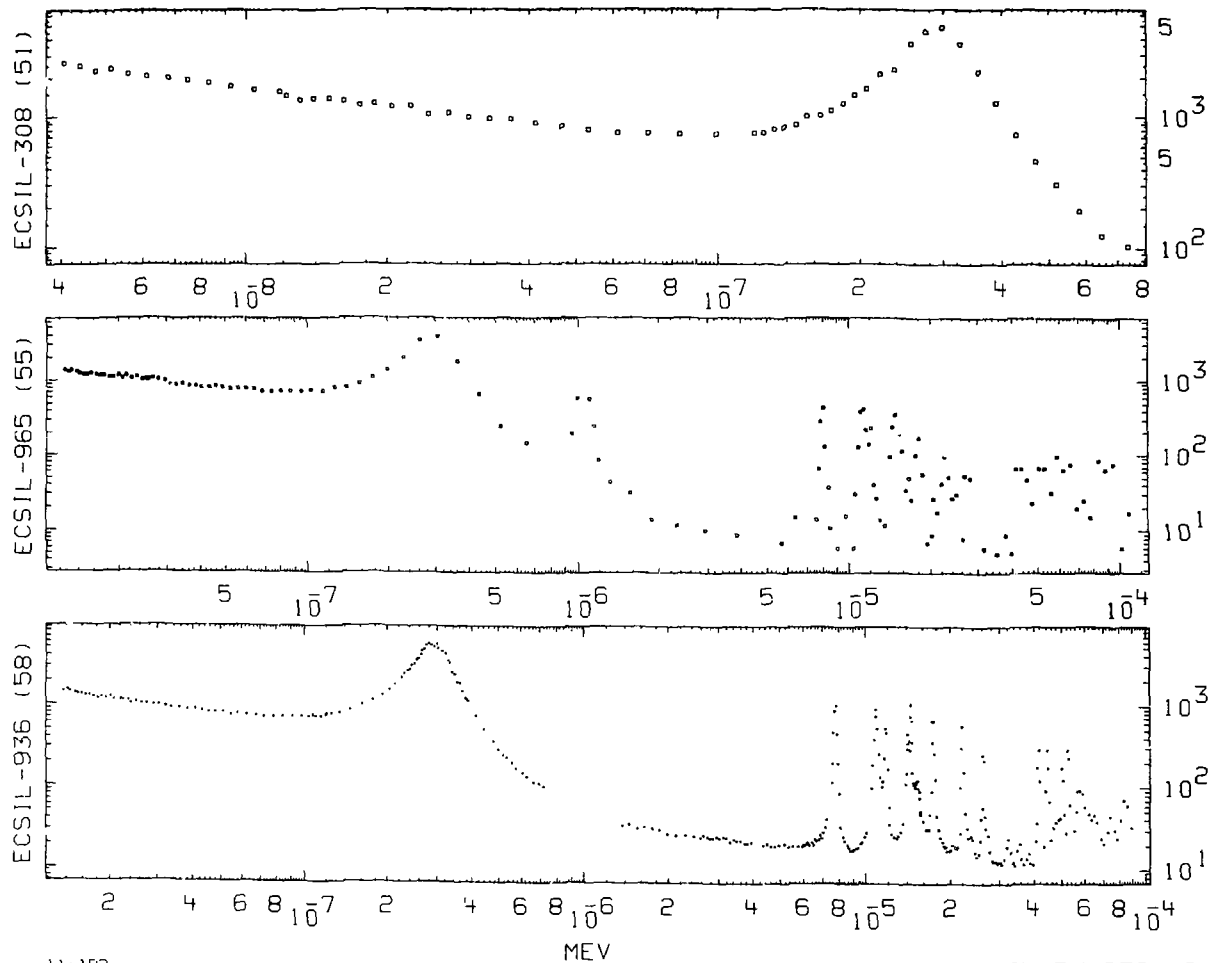
94-PU-239



03/01/74

TOTAL
CROSS SECTION

94-PU-239



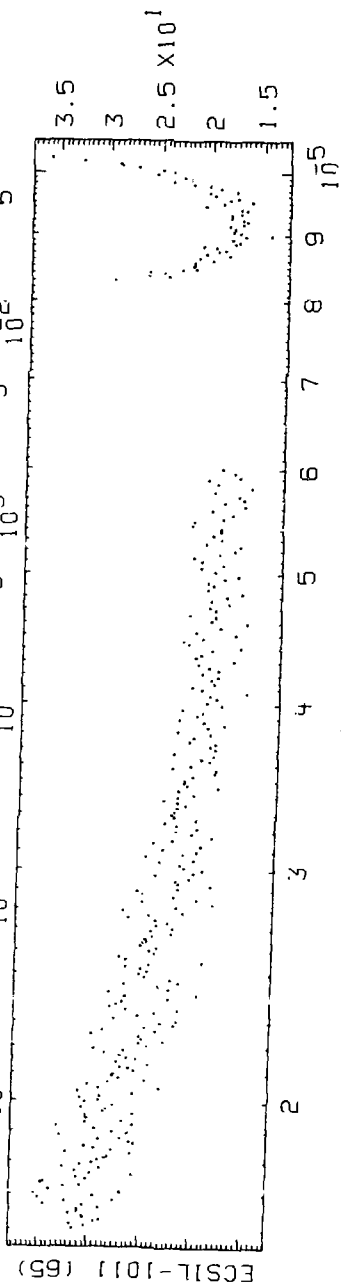
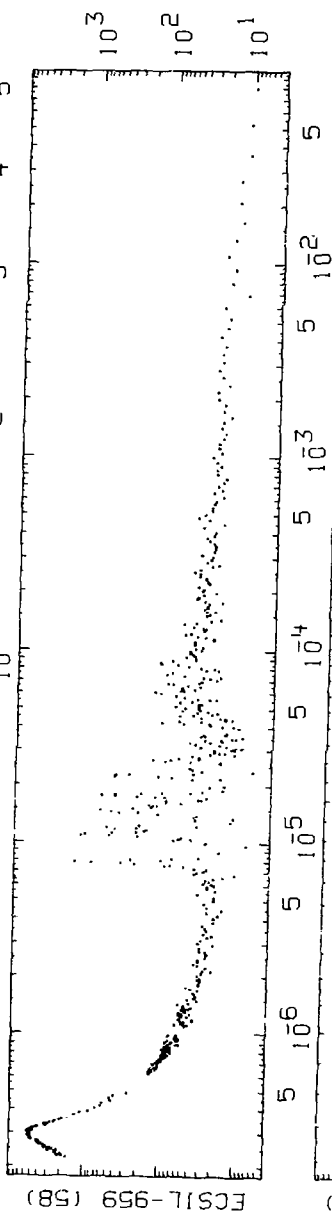
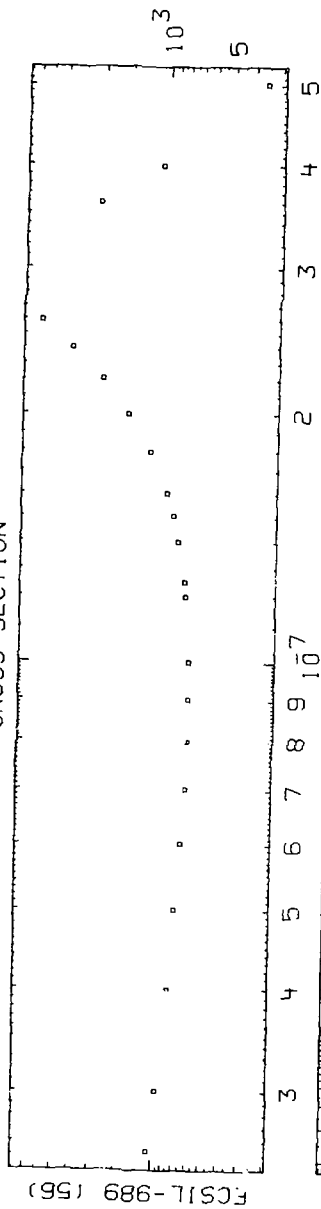
11-192

94-PU-239 -2

03/01/74

94-PU-239

TOTAL CROSS SECTION



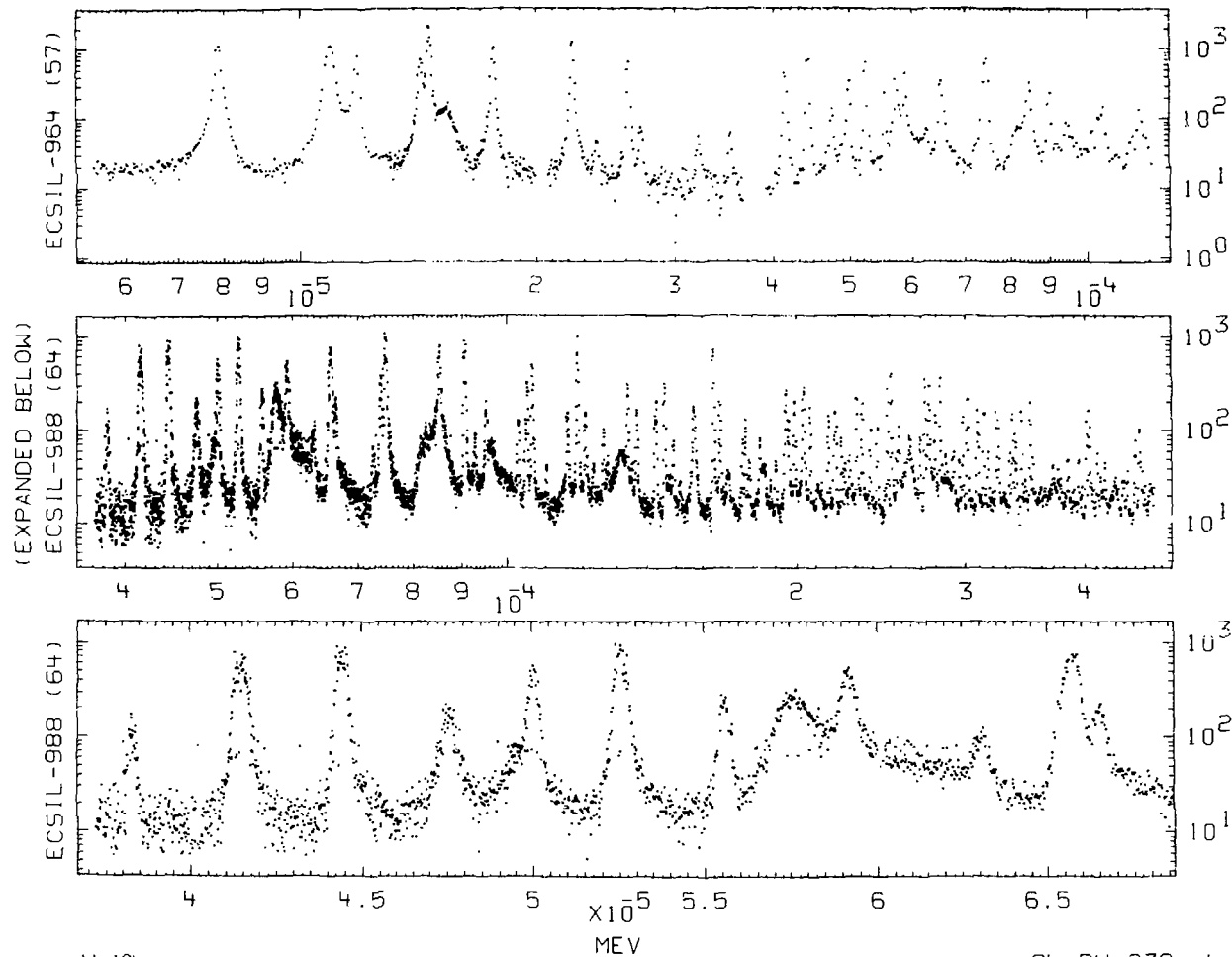
11-193

94-PU-239 -3

03/01/74

TOTAL
CROSS SECTION

94-PU-239



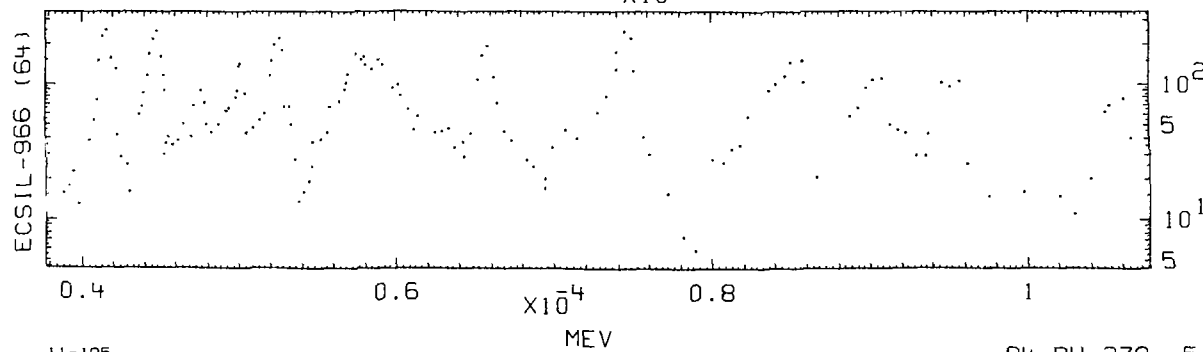
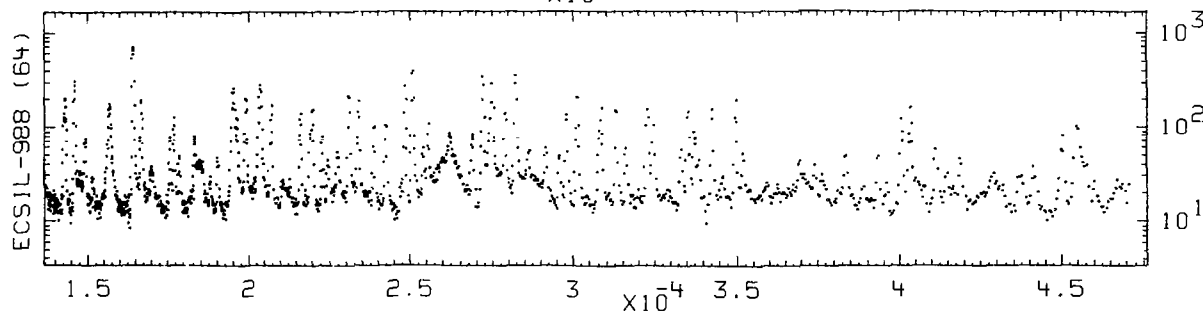
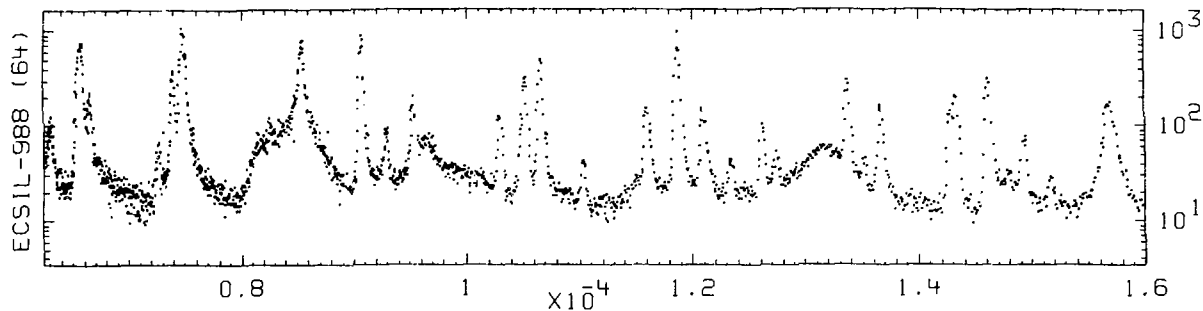
11-194

94-PU-239 -4

03/01/74

TOTAL
CROSS SECTION

94-PU-239



BARNs

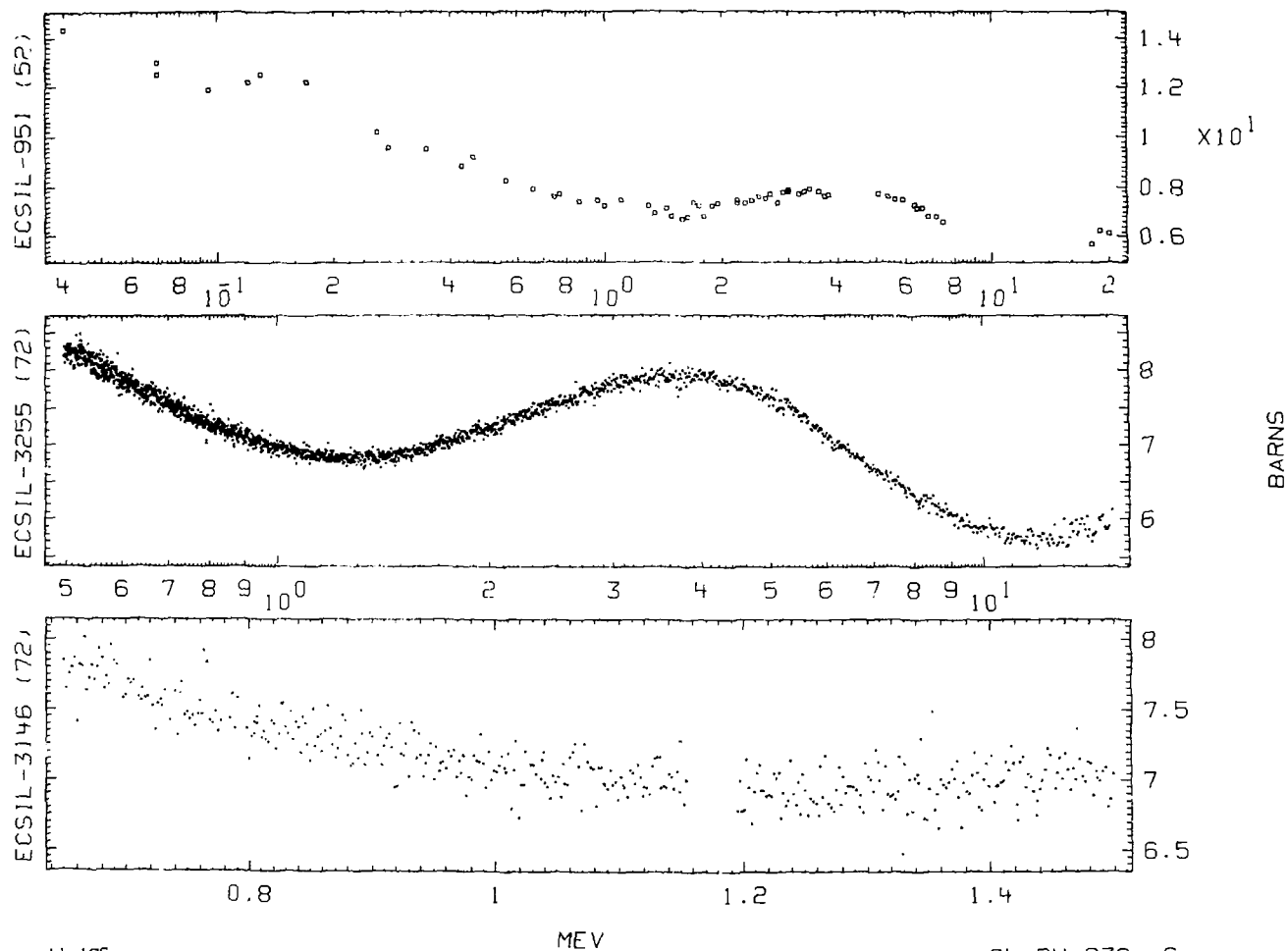
11-195

94-PU-239 -5

03/01/74

TOTAL
CROSS SECTION

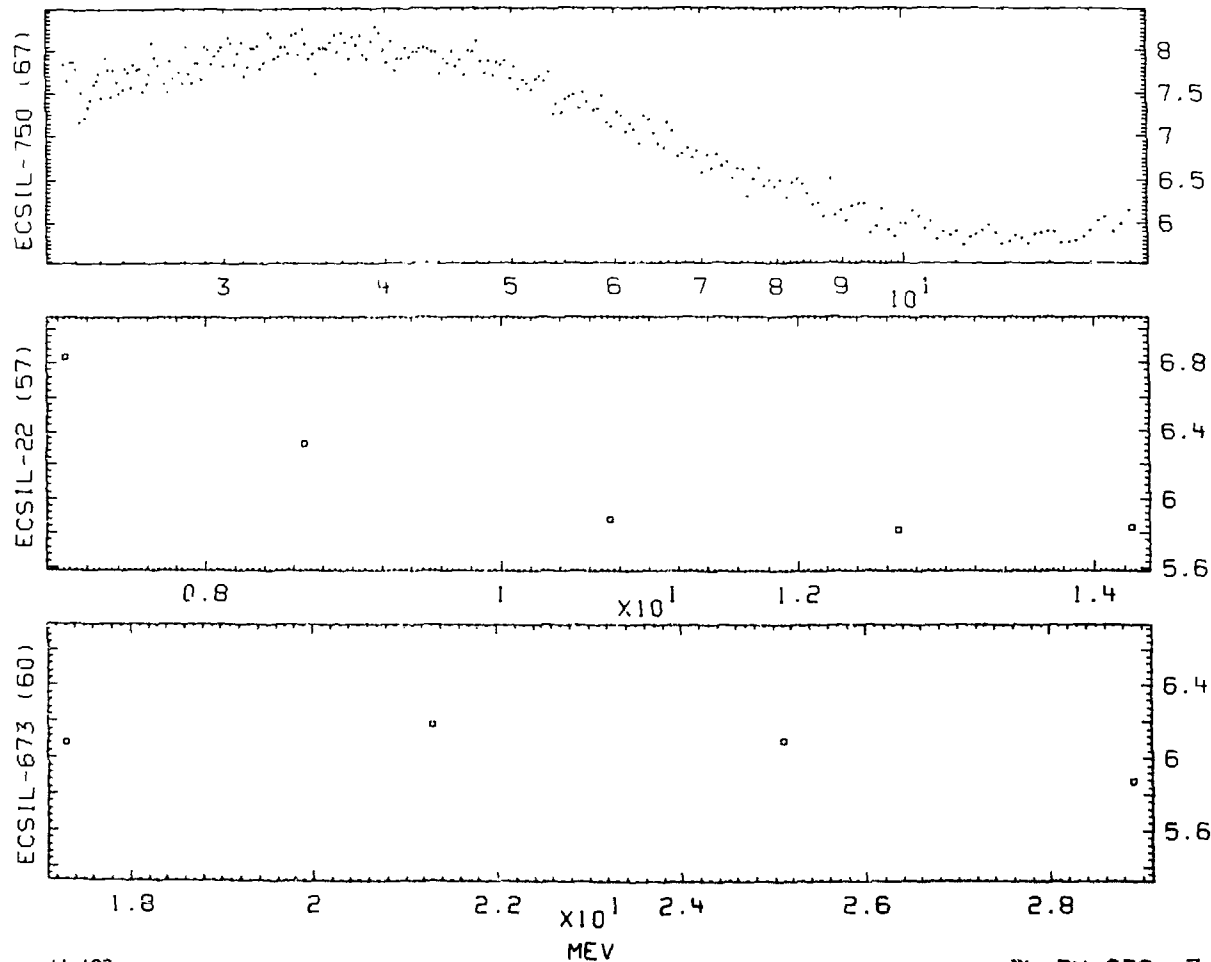
94-PU-239



03/01/74

TOTAL
CROSS SECTION

94-PU-239



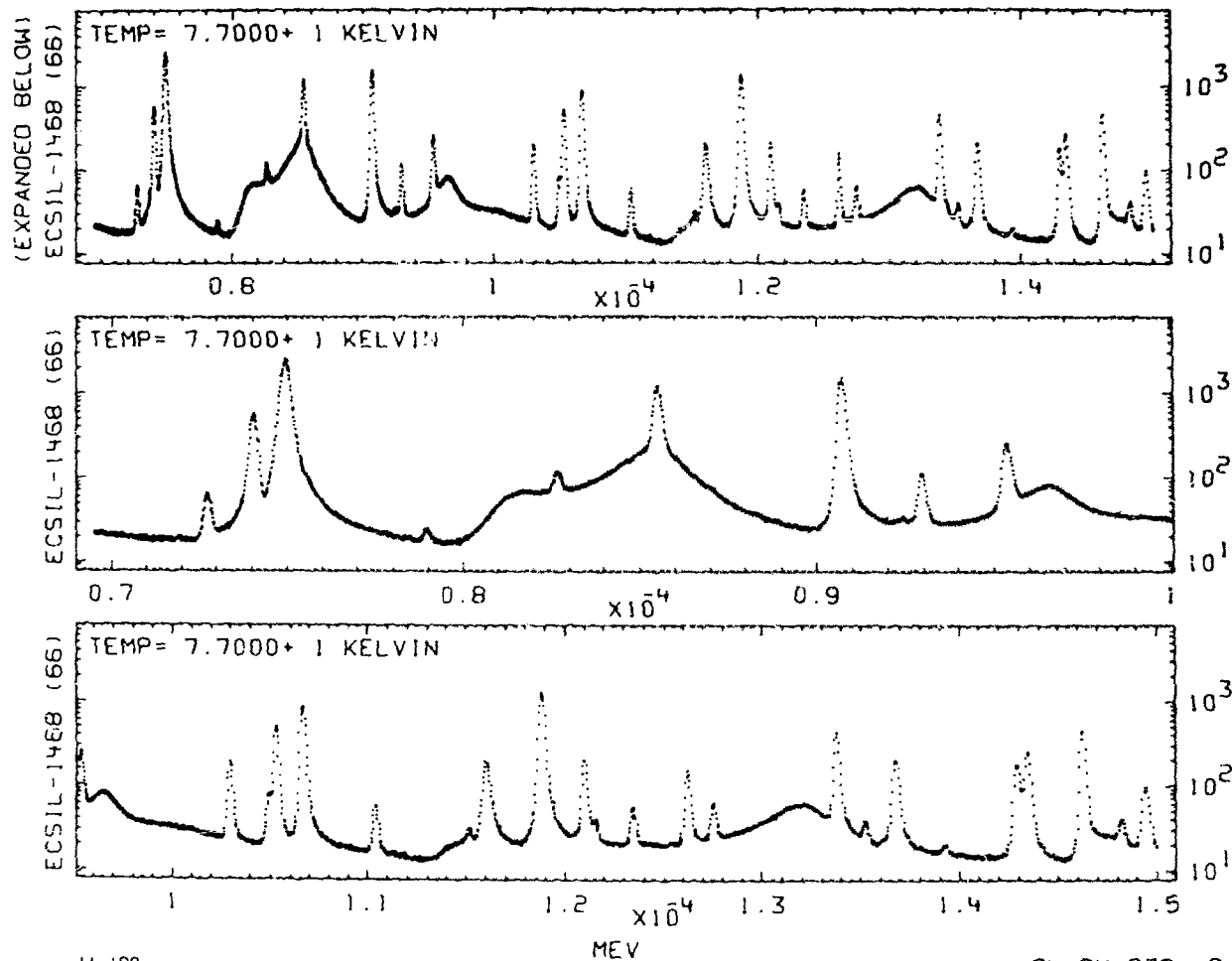
11-197

94-PU-239 -7

03/01/74

TOTAL
CROSS SECTION

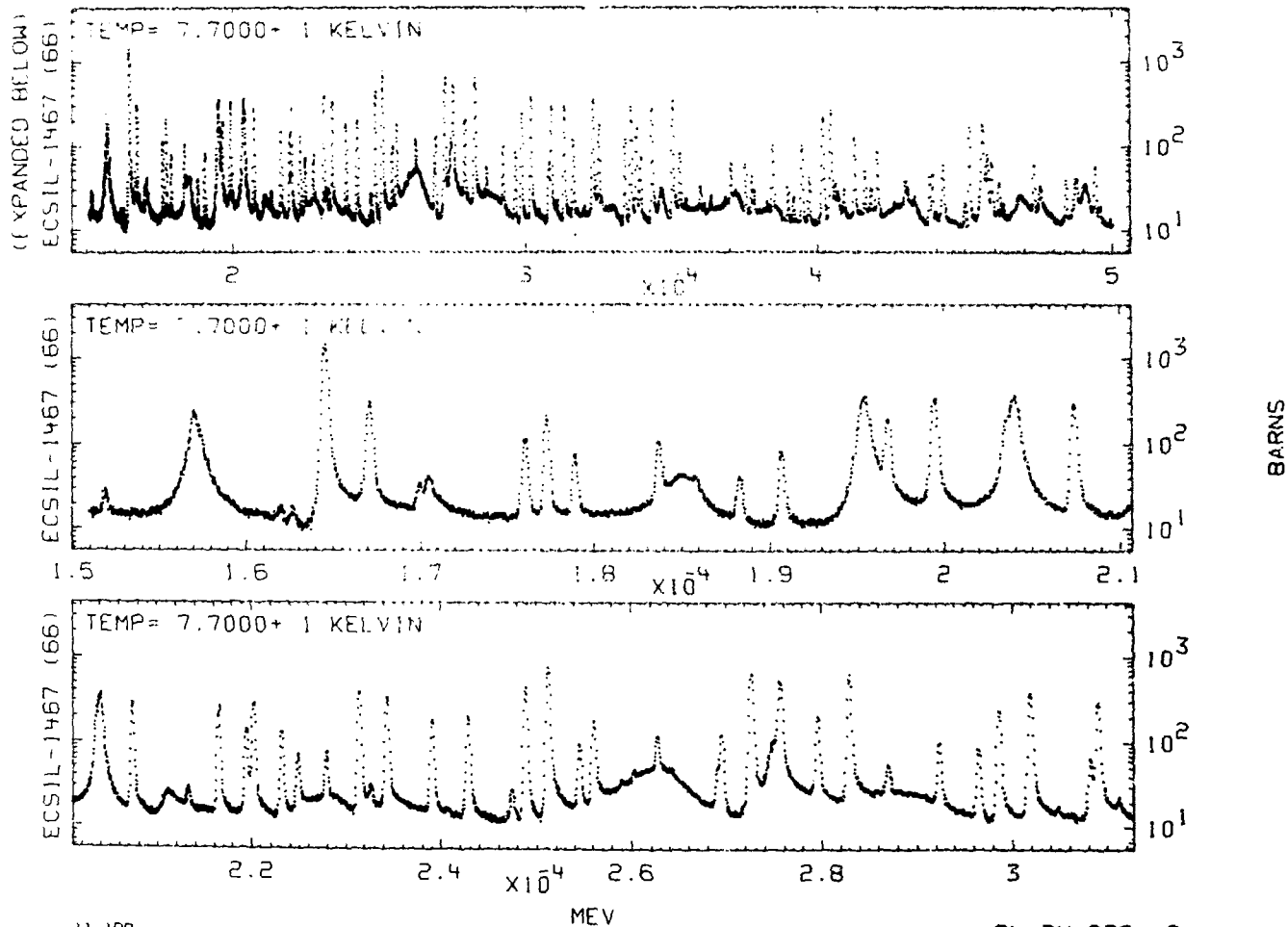
94-PU-239



03/01/74

TOTAL
CROSS SECTION

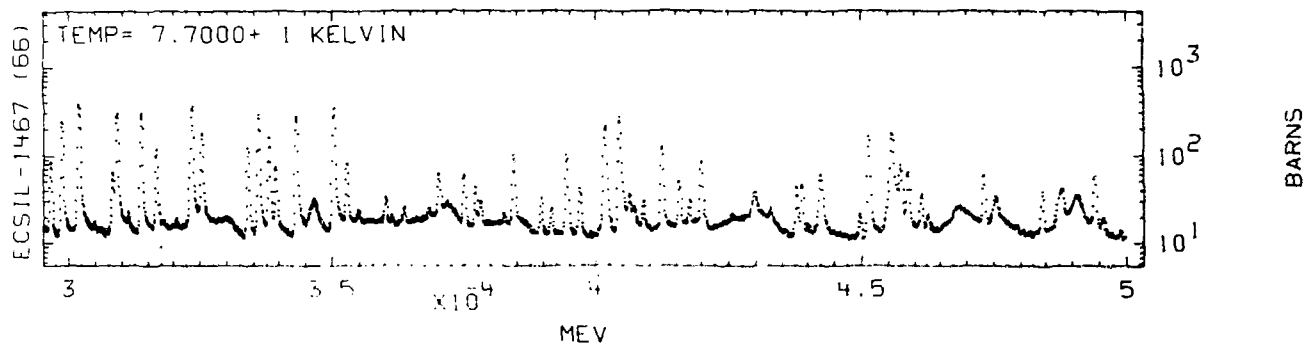
94-PU-239



03/01/74

TOTAL
CROSS SECTION

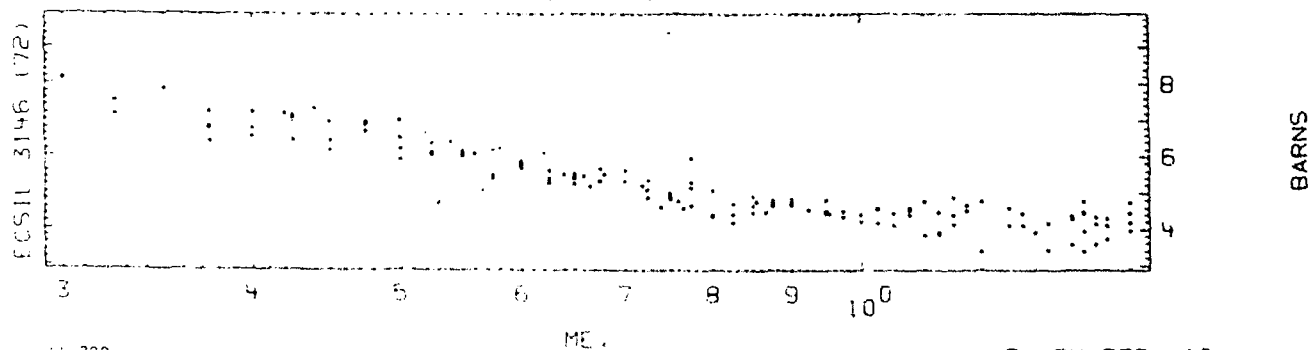
94-PU-239



03/01/74

ELASTIC
CROSS SECTION

94-PU-239



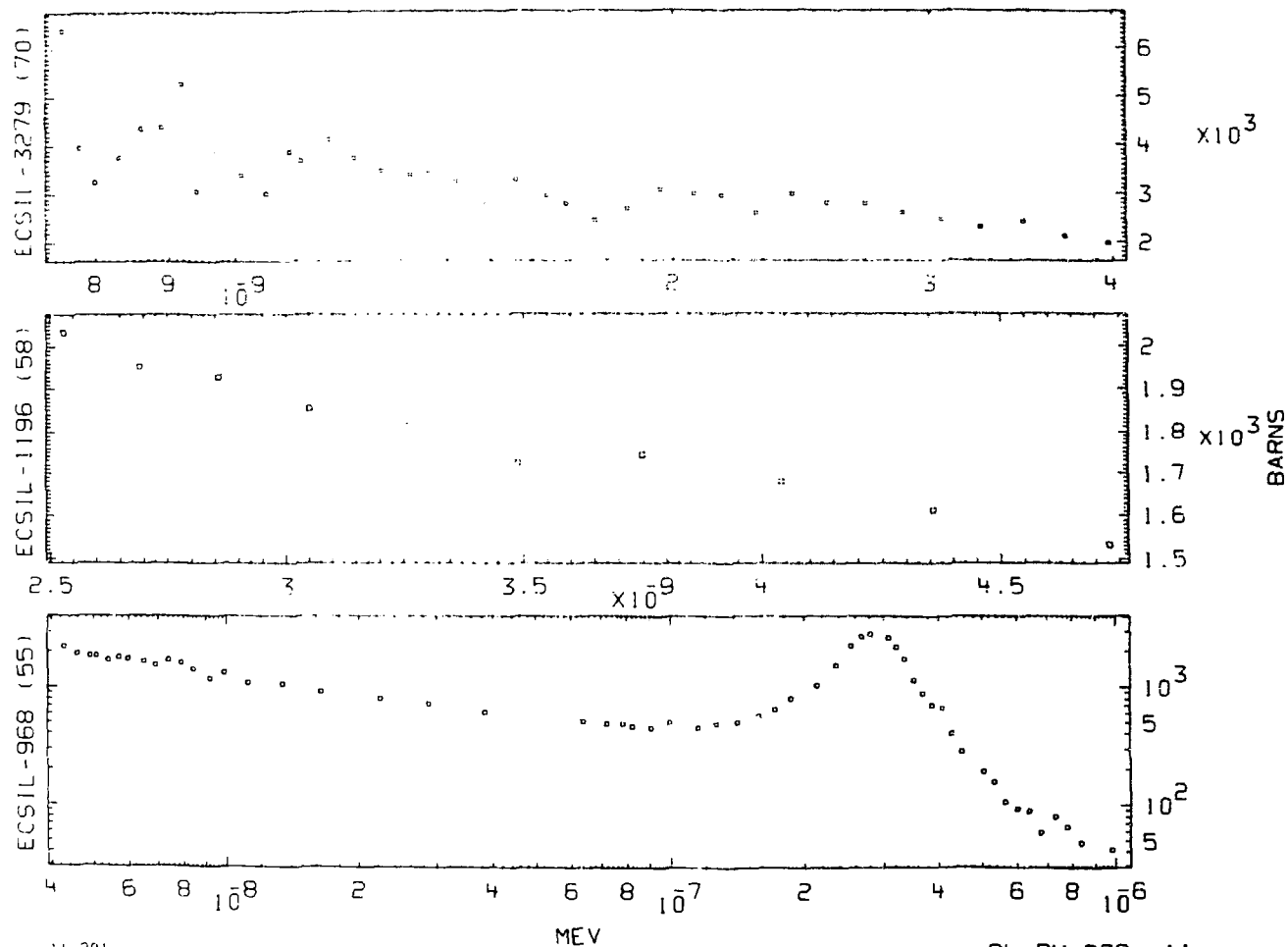
11-200

94-PU-239 -10

03/01/74

FISSION
CROSS SECTION

94-PU-239



11-201

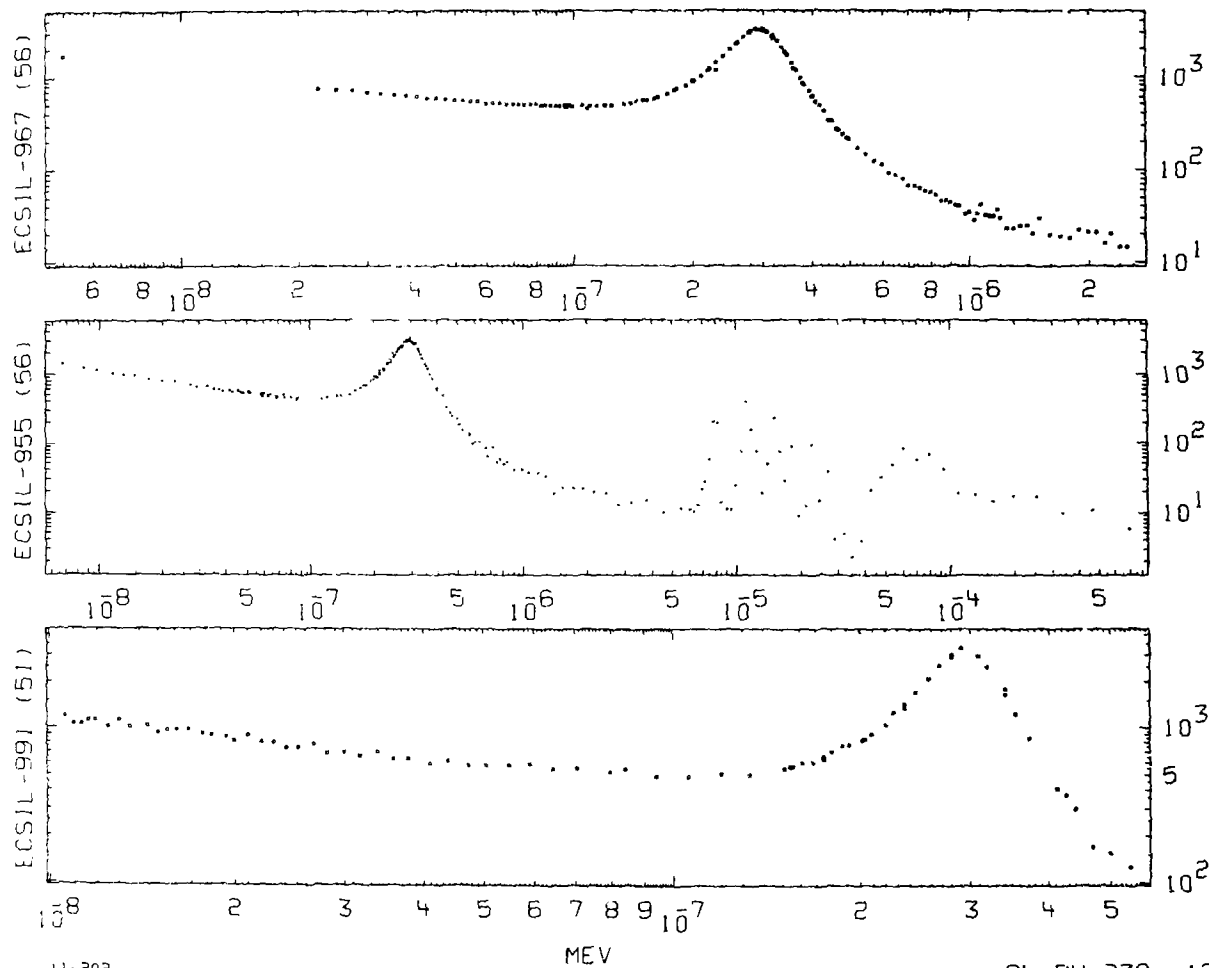
MEV

94-PU-239 -11

03/01/74

FISSION
CROSS SECTION

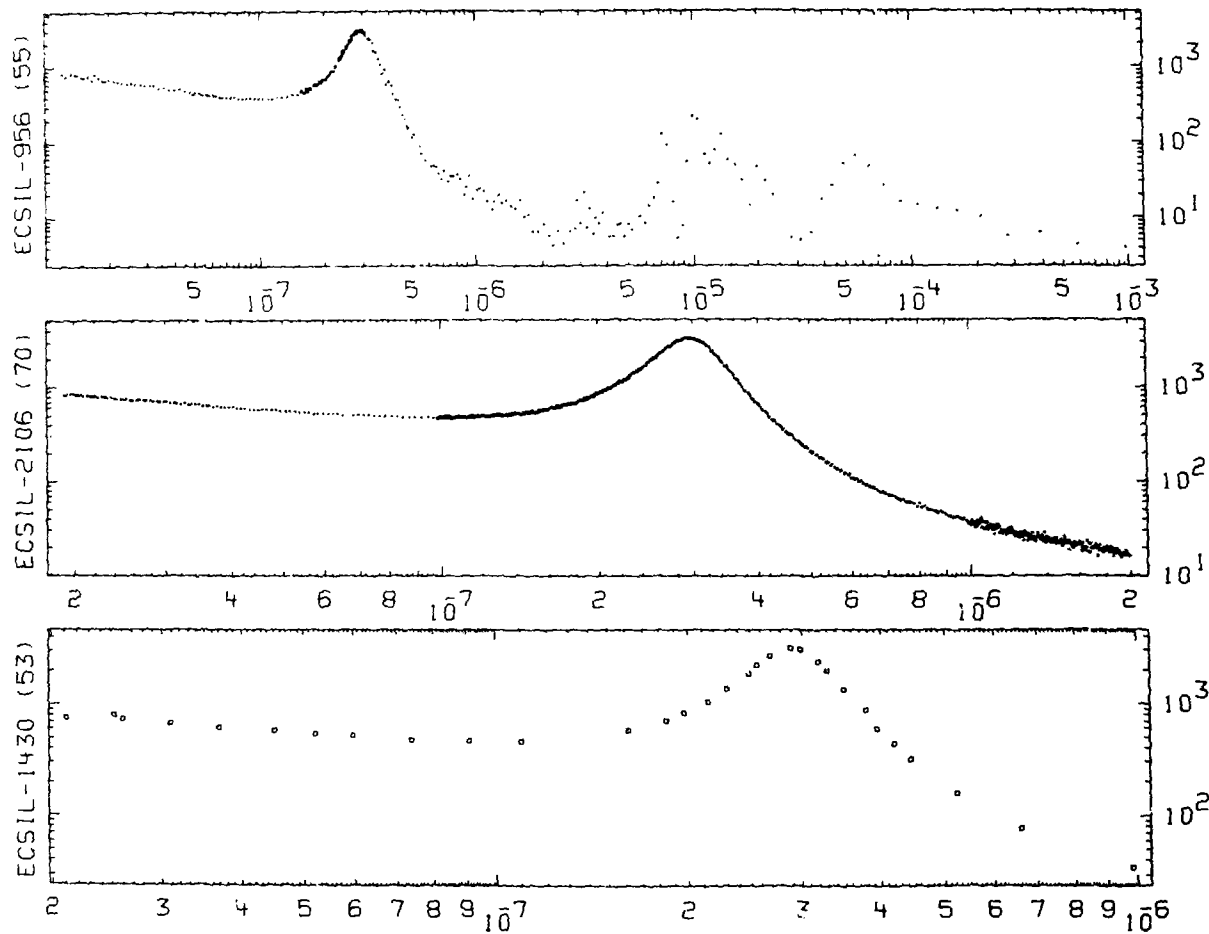
94-PU-239



03/01/74

FISSION
CROSS SECTION

94-PU-239



BARNs

11-203

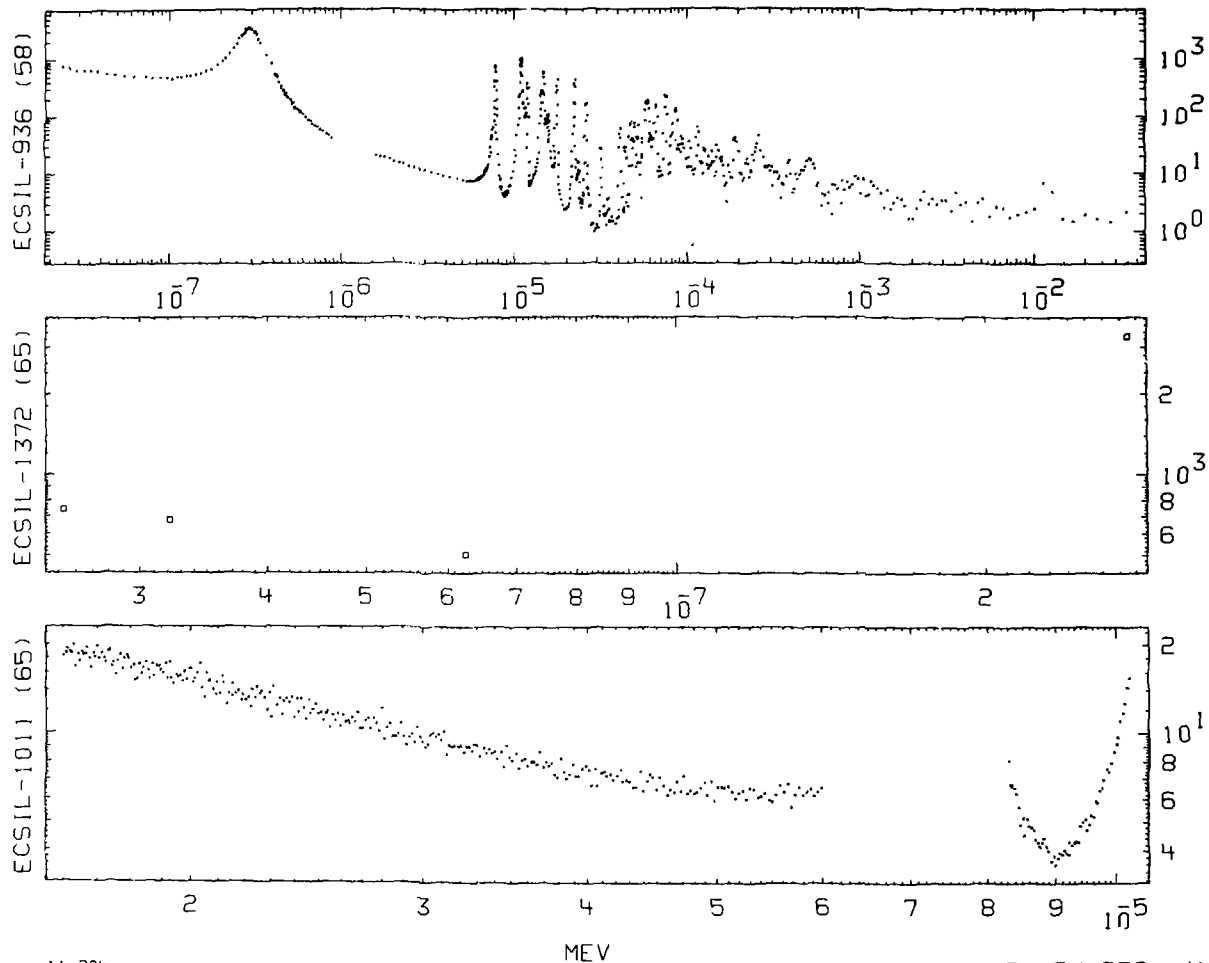
MEV

94-PU-239 -13

03/01/74

FISSION
CROSS SECTION

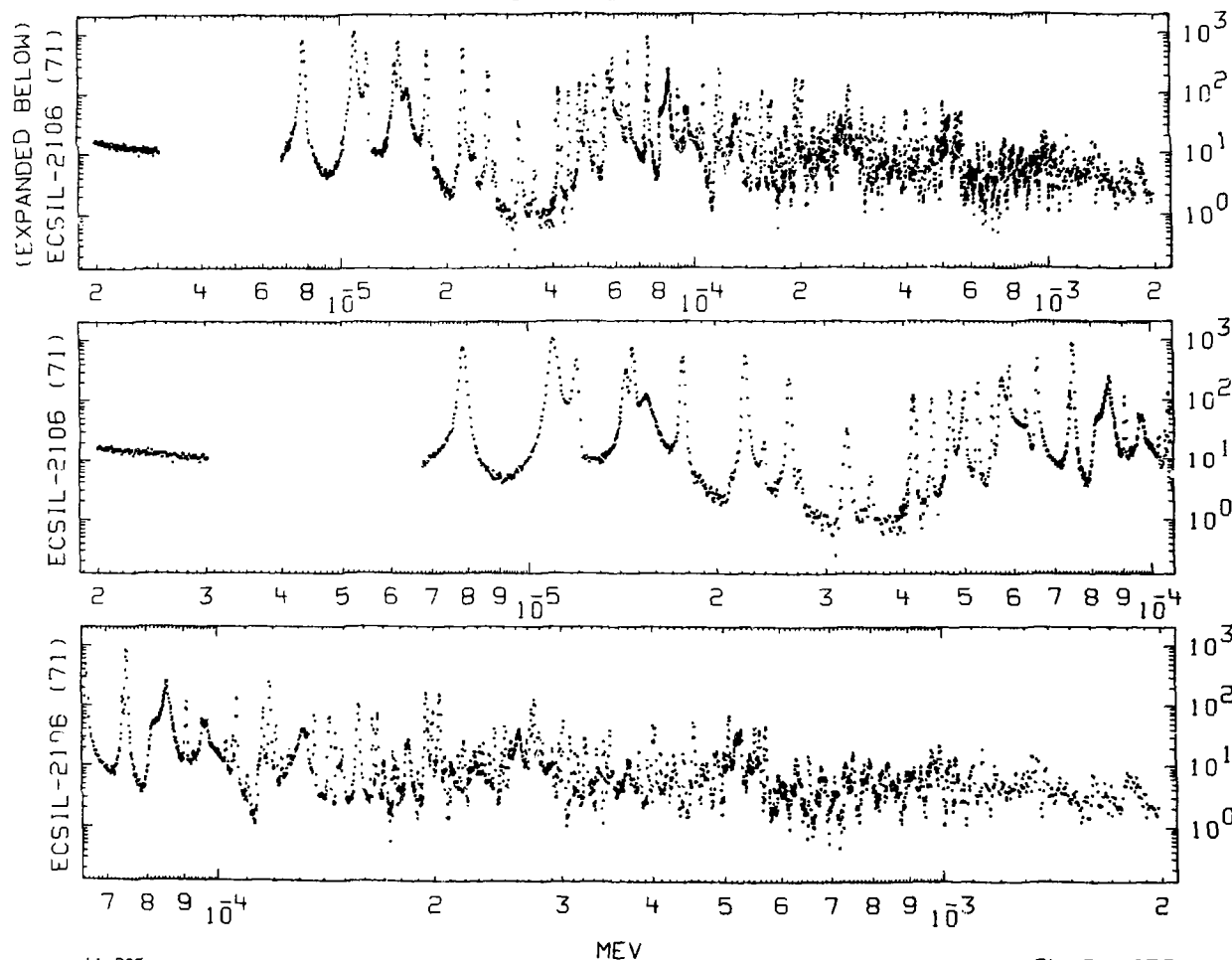
94-PU-239



03/01/74

FISSION
CROSS SECTION

94-PU-239



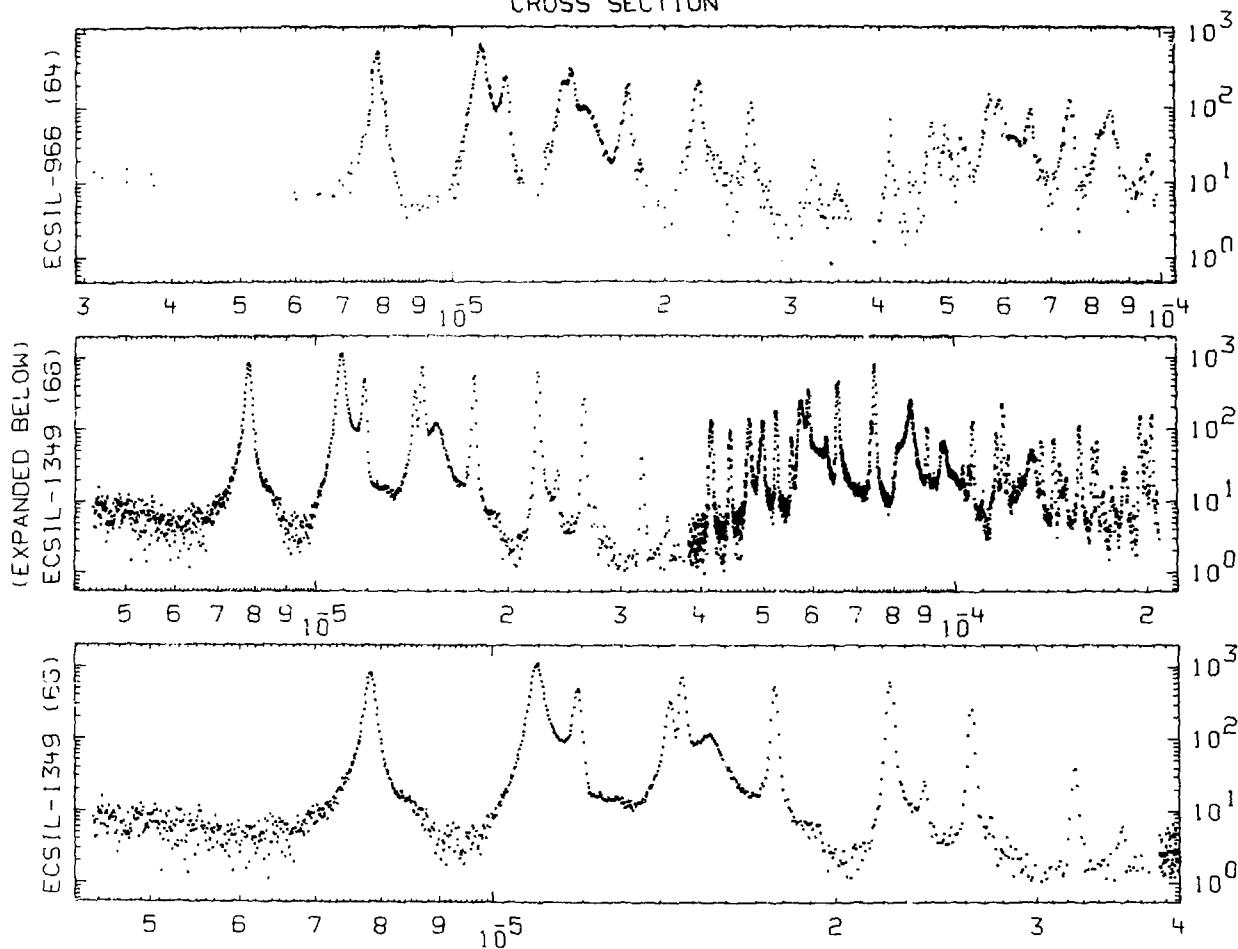
11-205

94-PU-239 -15

03/01/74

FISSION
CROSS SECTION

94-PU-239



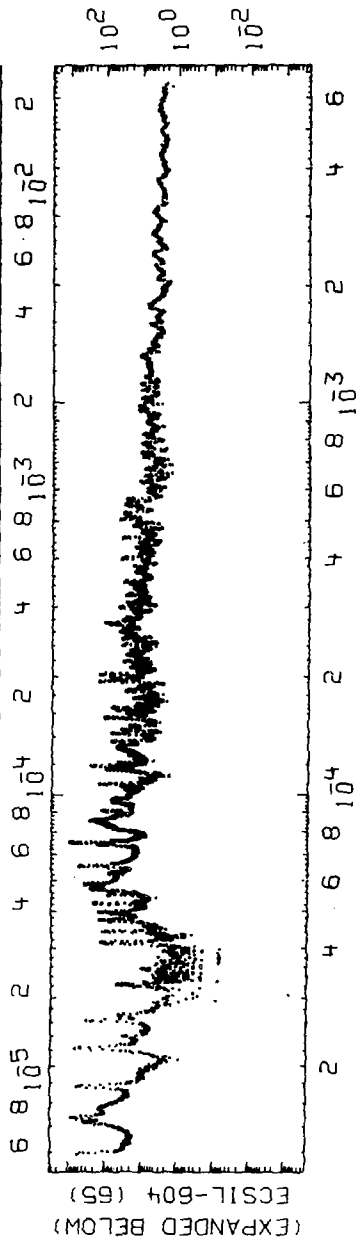
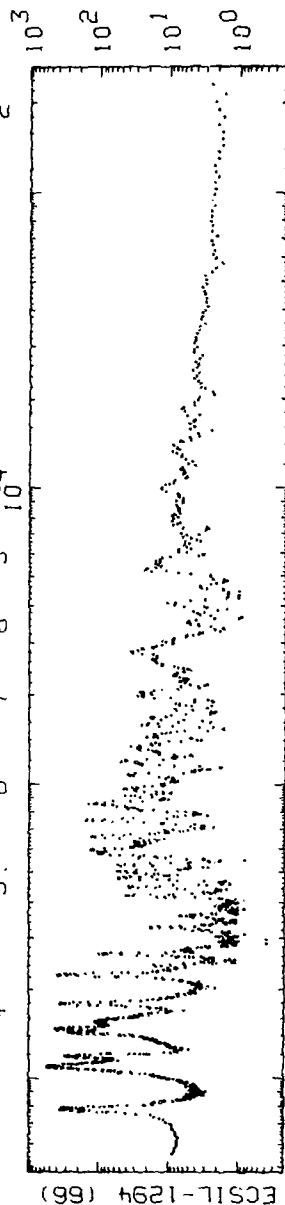
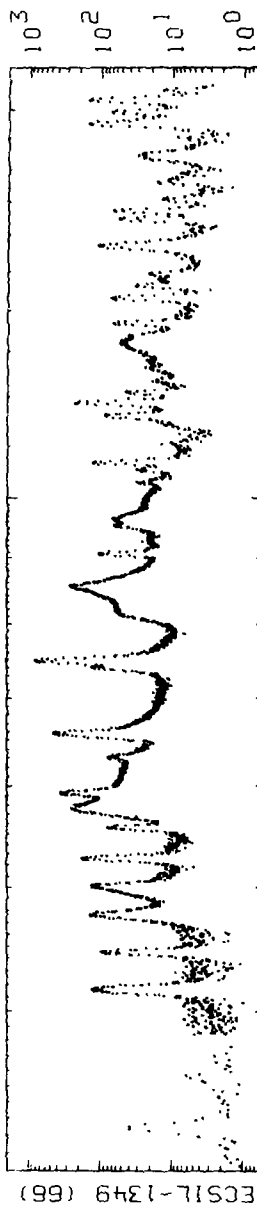
11-206

94-PU-239 -16

03/01/74

FISSION
CROSS SECTION

94-PU-239



BARNs

11-207

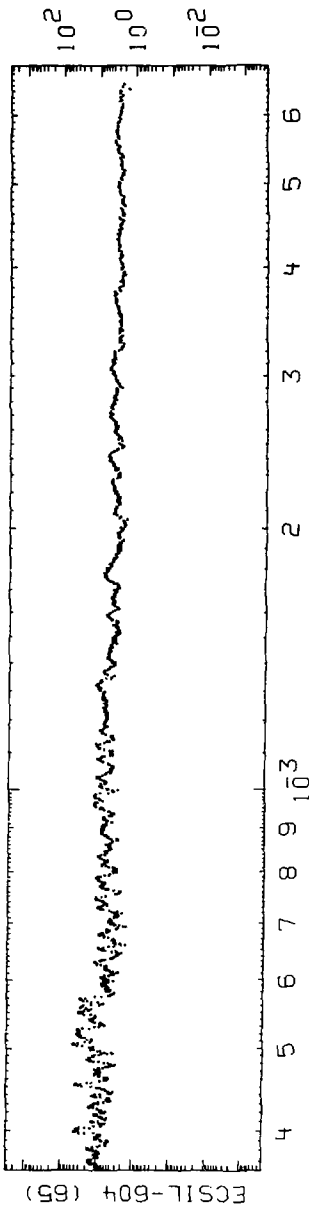
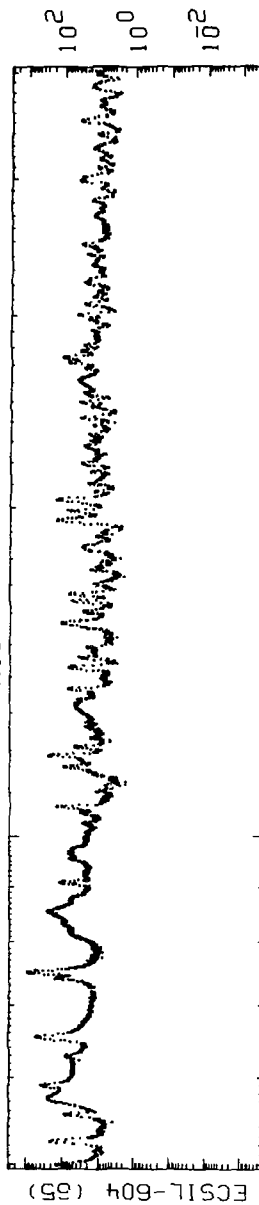
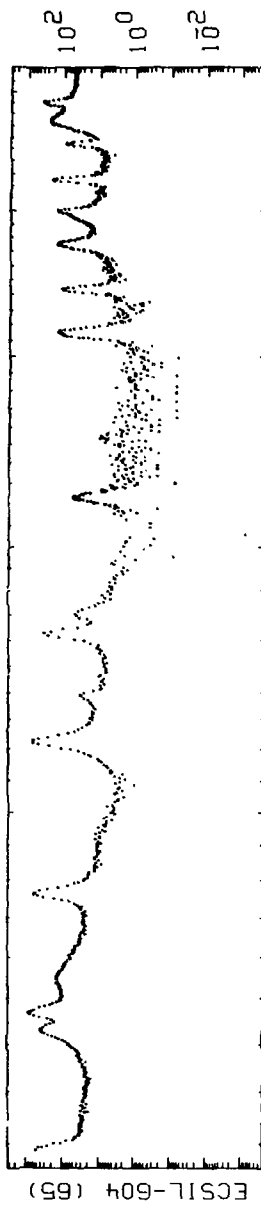
MEV

94-PU-239 -17

03/01/74

FISSION
CROSS SECTION

94-PU-239

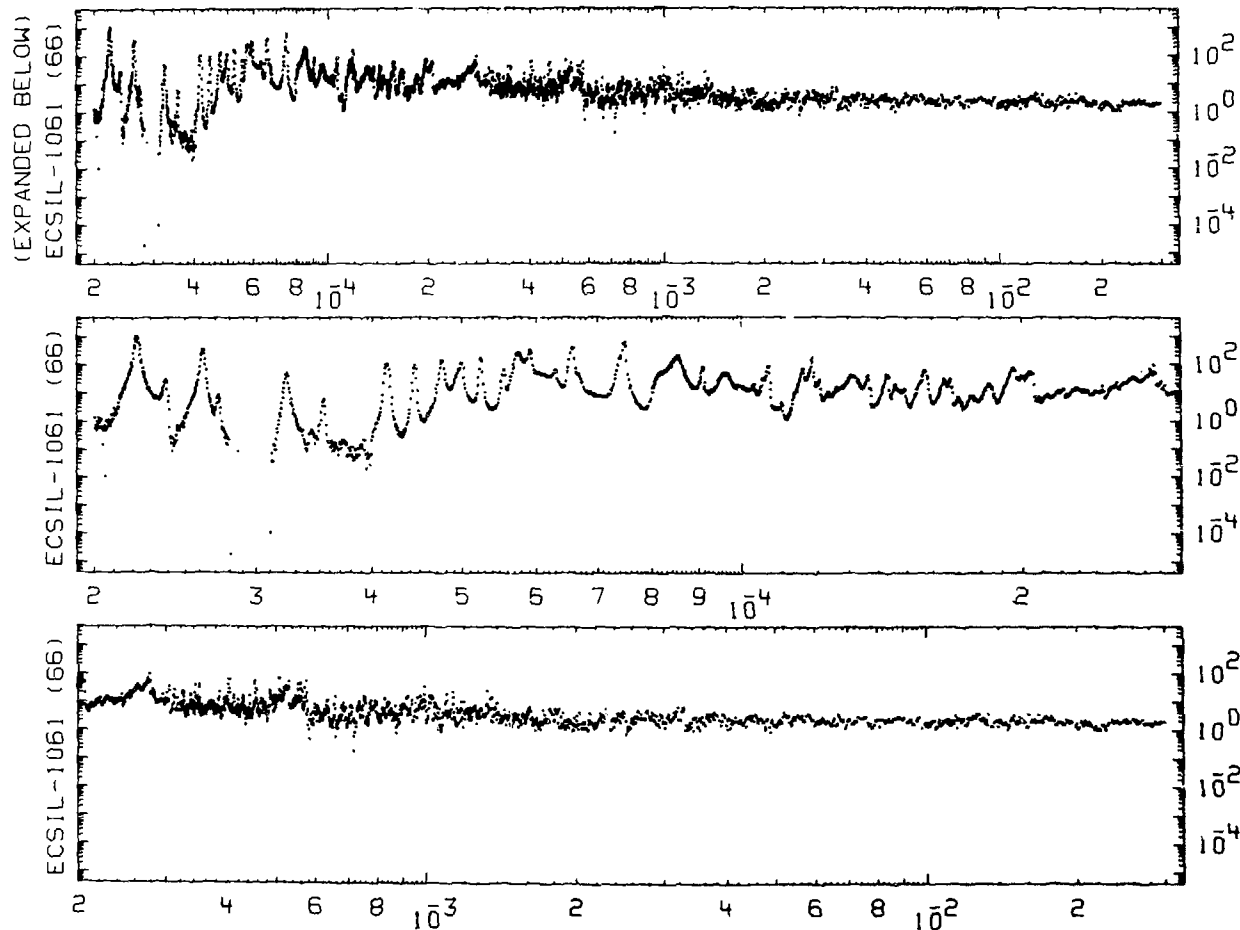


PARNS

03/01/74

FISSION CROSS SECTION

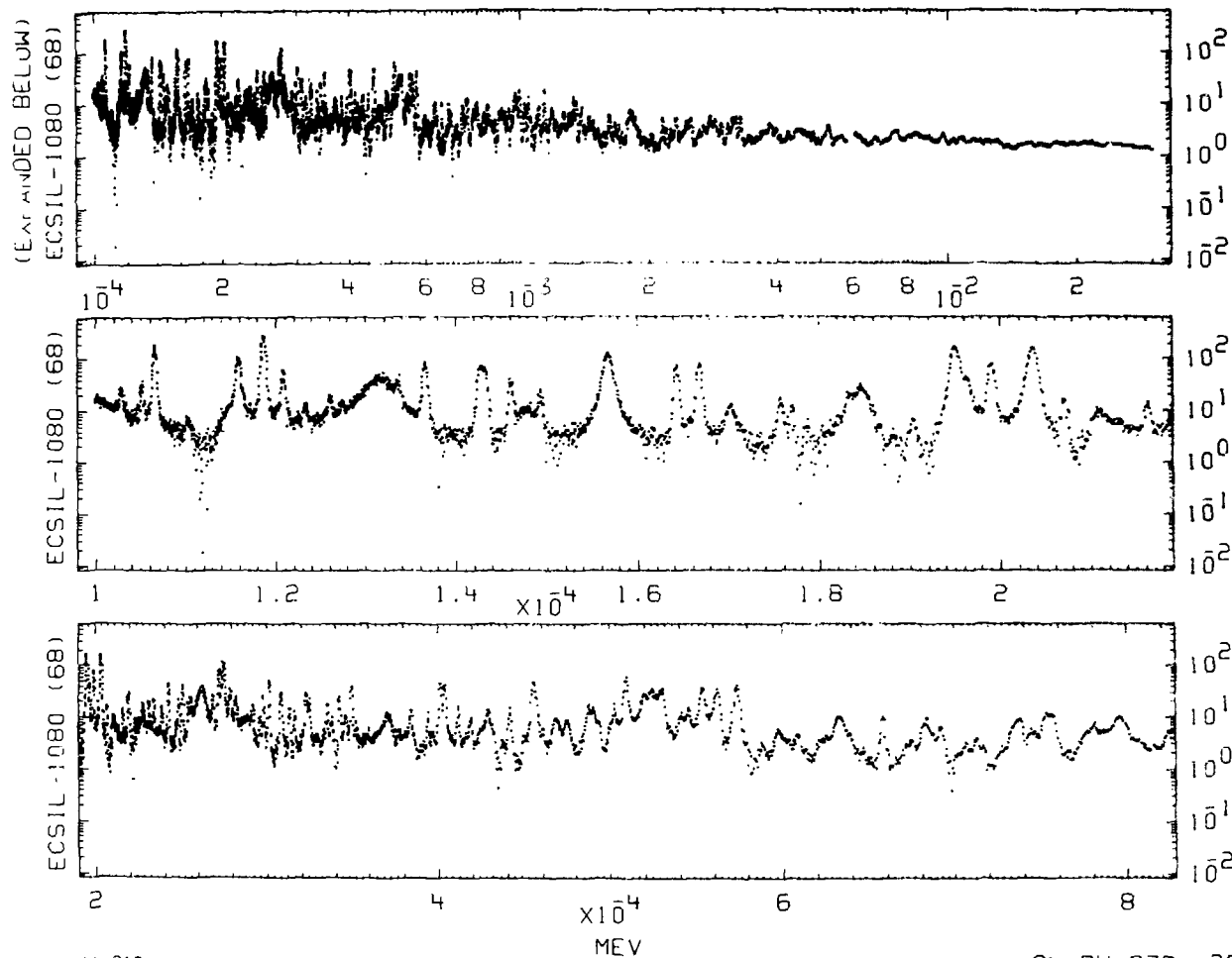
94-PU-239



03/01/74

FISSION
CROSS SECTION

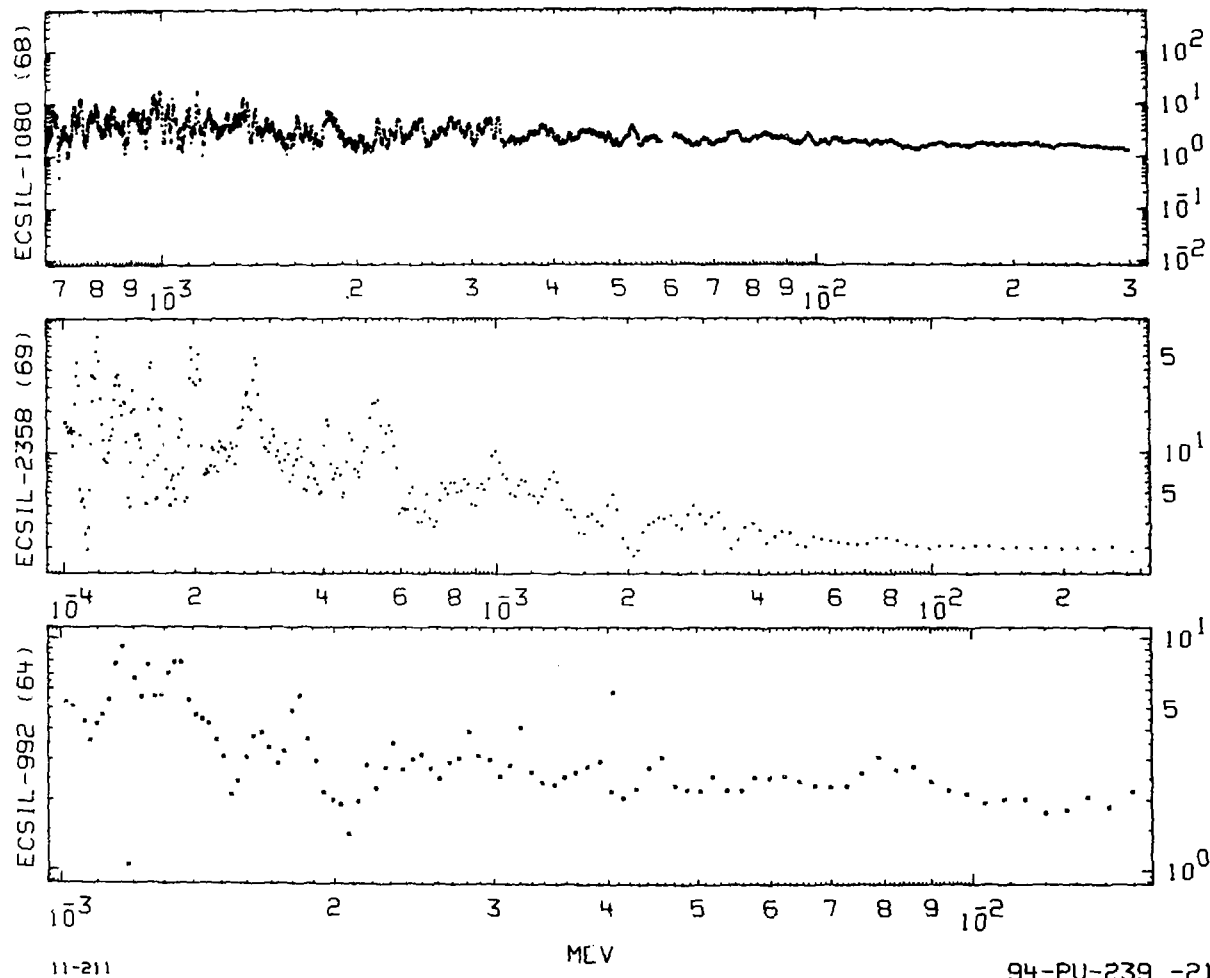
94-PU-239



03/01/74

FISSION
CROSS SECTION

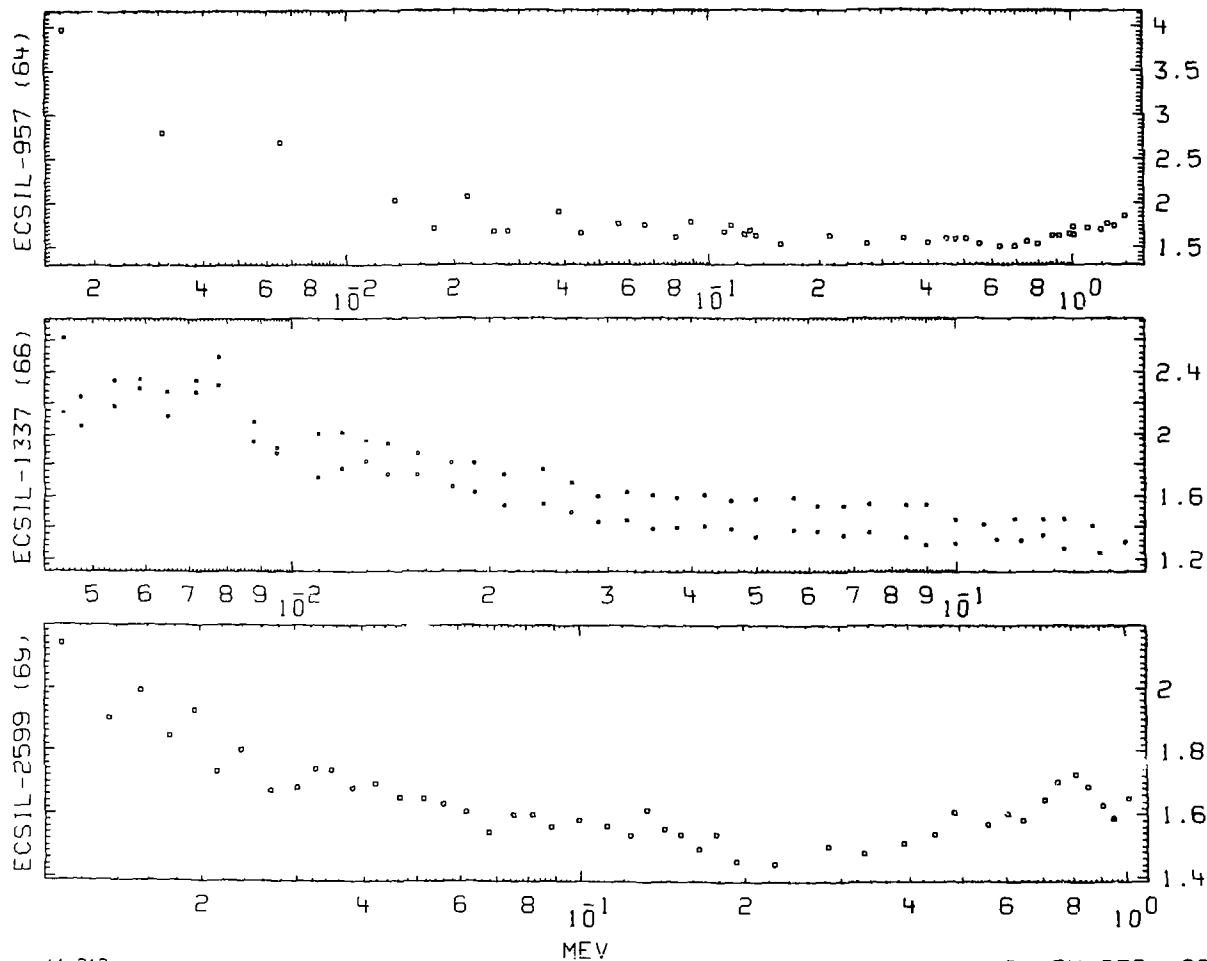
94-PU-239



03/01/74

FISSION
CROSS SECTION

94-PU-239



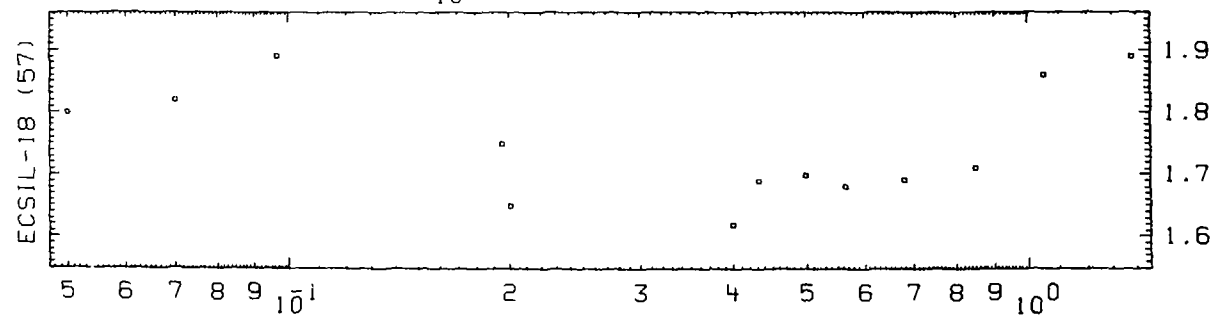
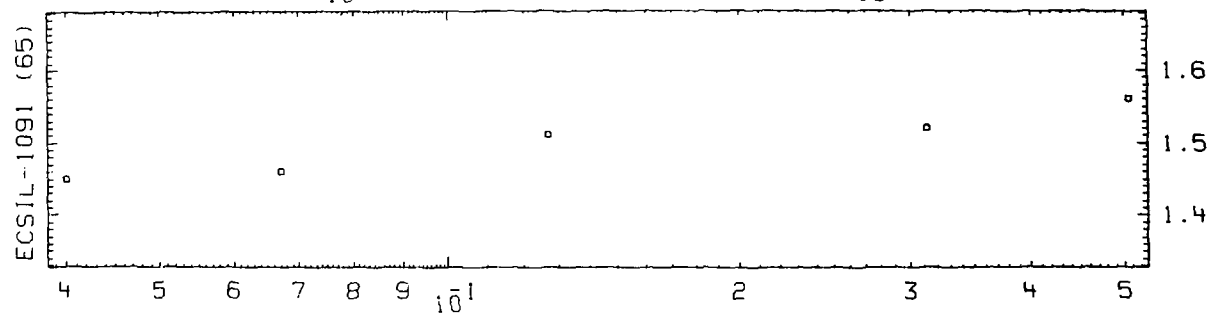
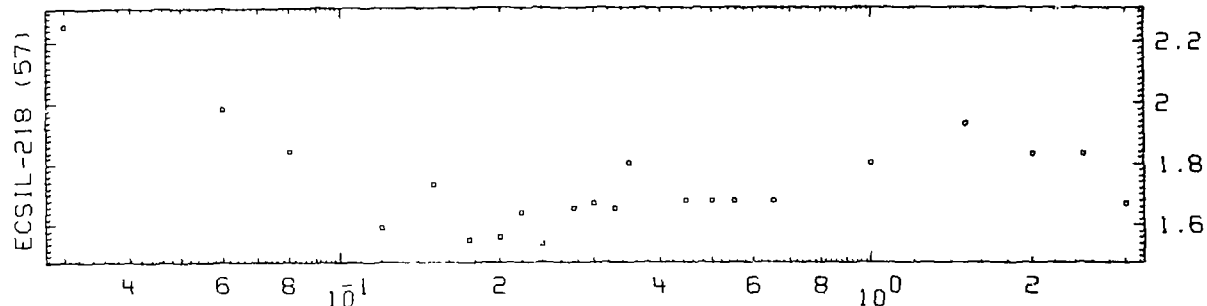
11-212

94-PU-239 -22

03/01/74

FISSION
CROSS SECTION

94-PU-239



11-213

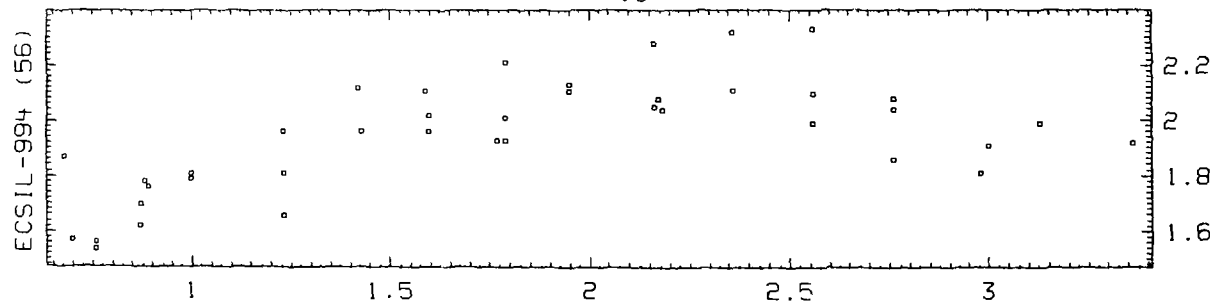
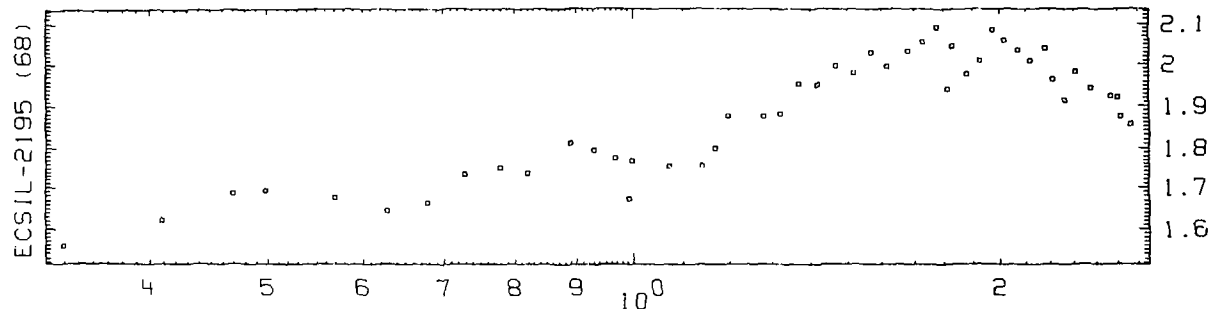
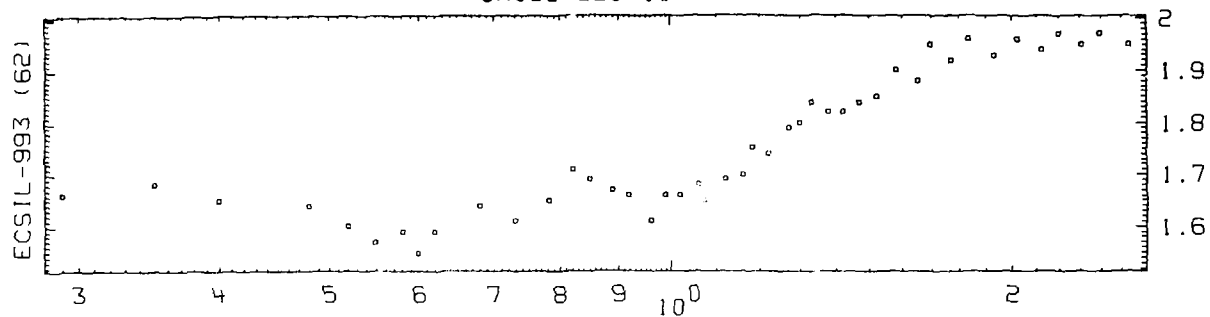
MEV

94-PU-239 -23

03/01/74

FISSION
CROSS SECTION

94-PU-239



11-214

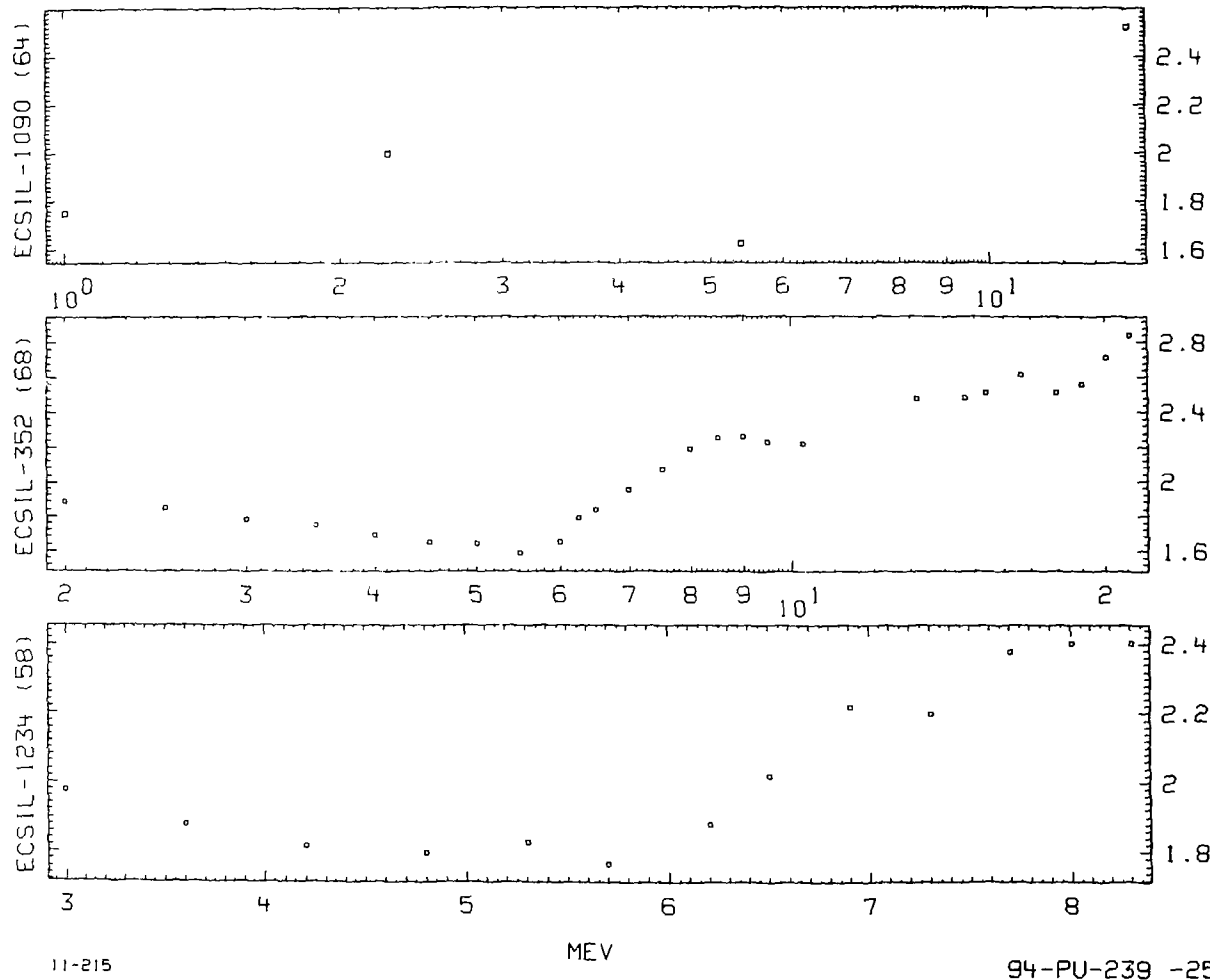
MEV

94-PU-239 -24

03/01/74

FISSION
CROSS SECTION

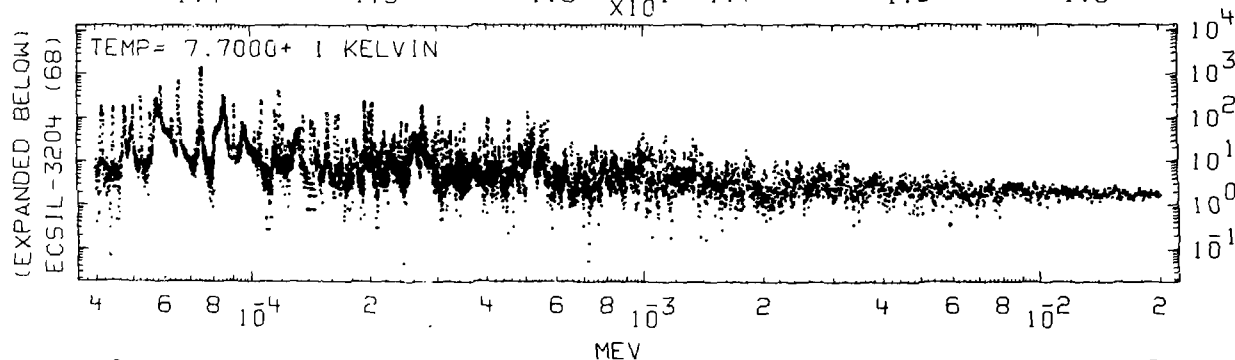
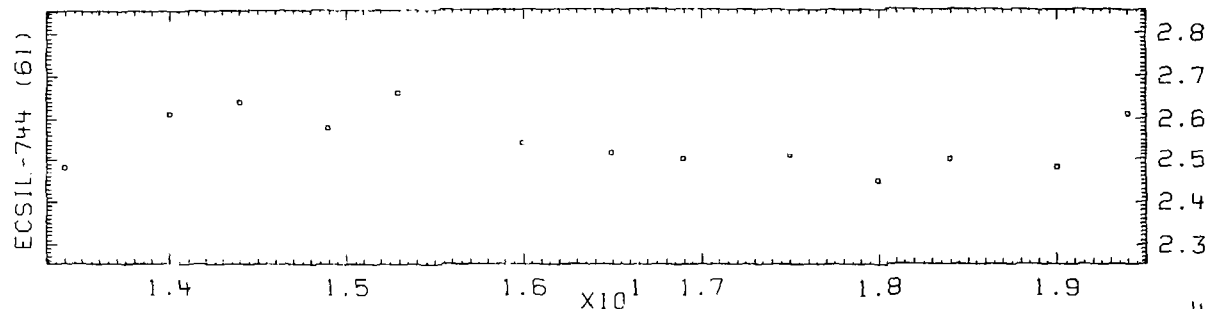
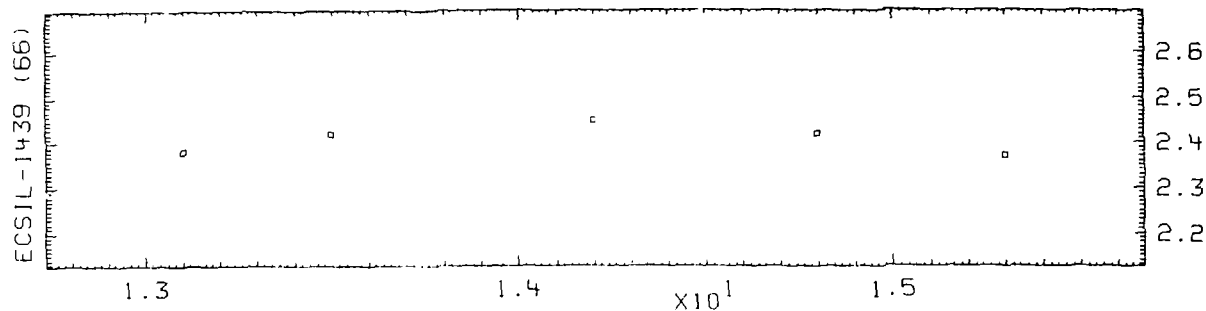
94-PU-239



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FISSION CROSS SECTION

94-PU-239



11-216

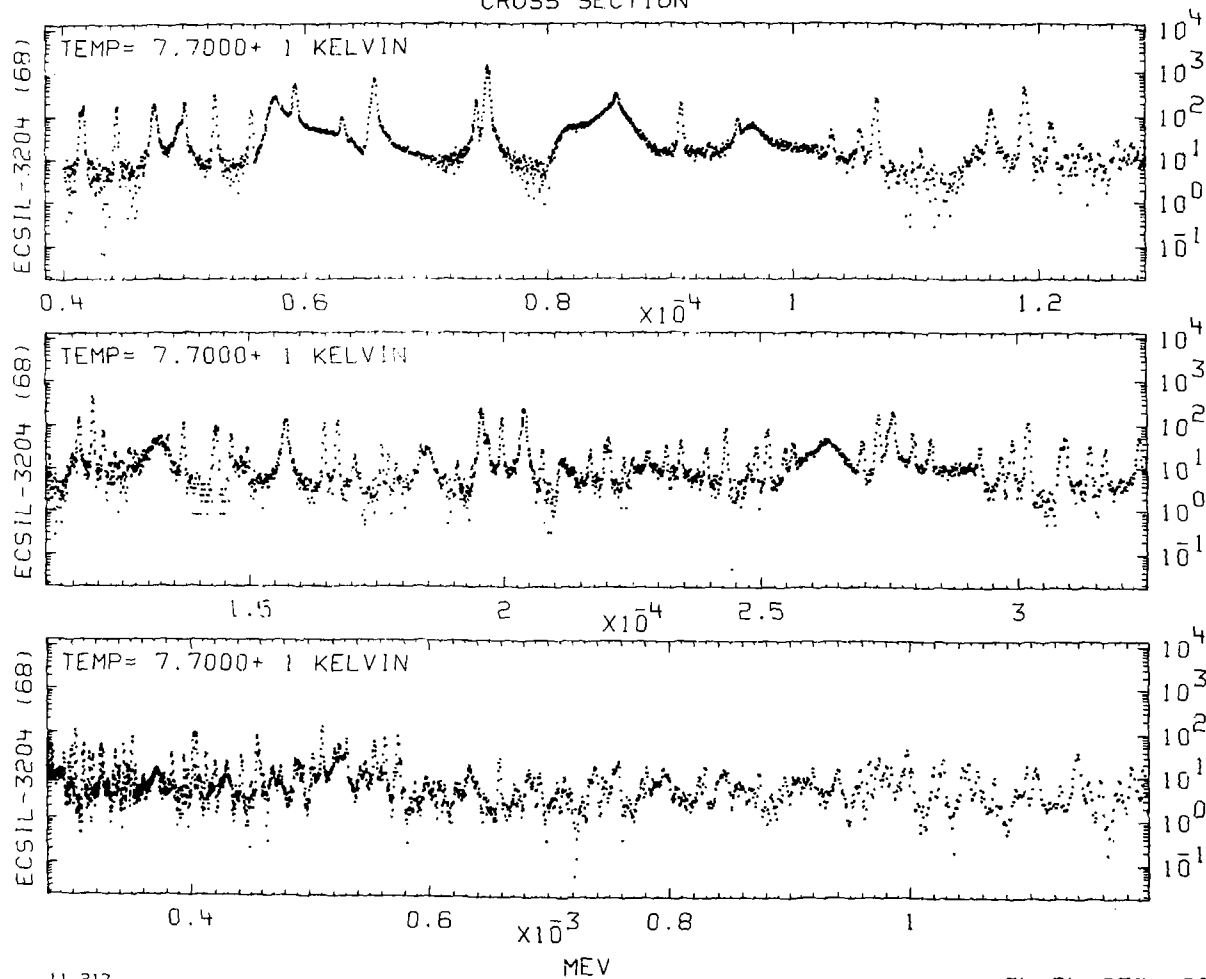
94-PU-239 -26

BARN

03/01/74

FISSION
CROSS SECTION

94-PU-239



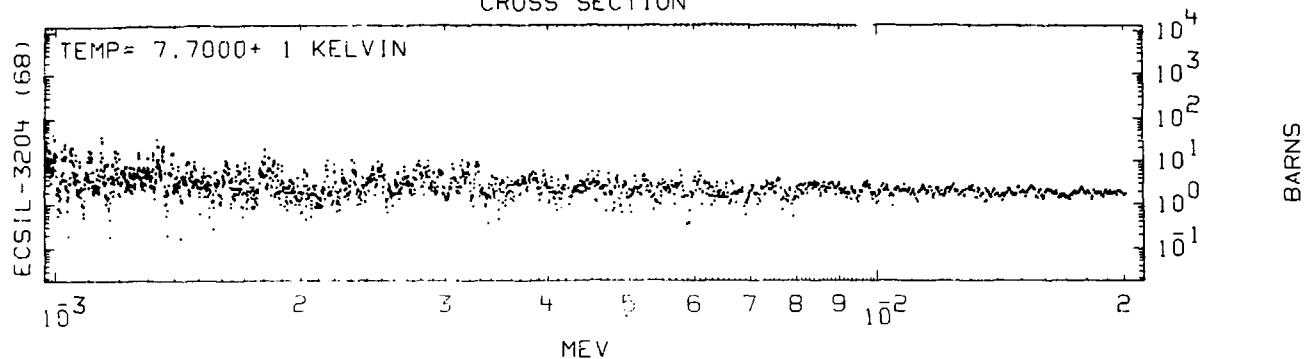
11-217

94-PU-239 -27

03/01/74

FISSION
CROSS SECTION

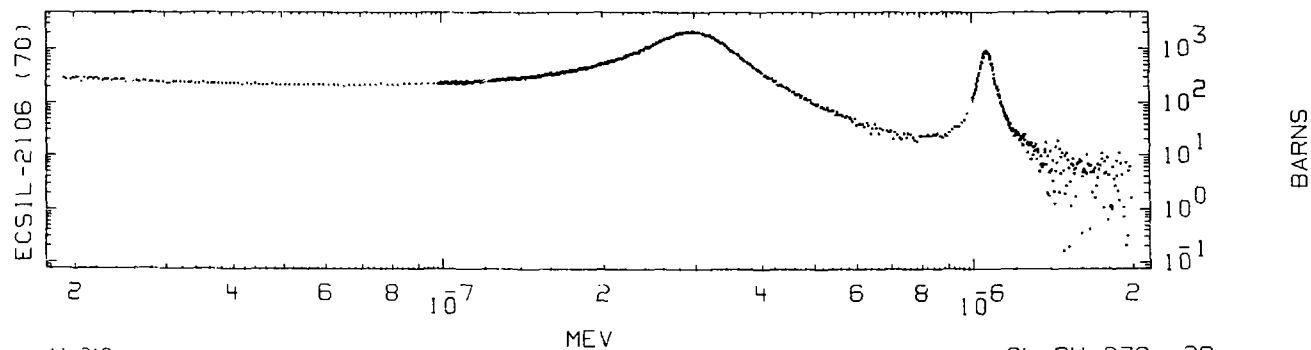
94-PU-239



03/01/74

N, GAMMA
CROSS SECTION

94-PU-239

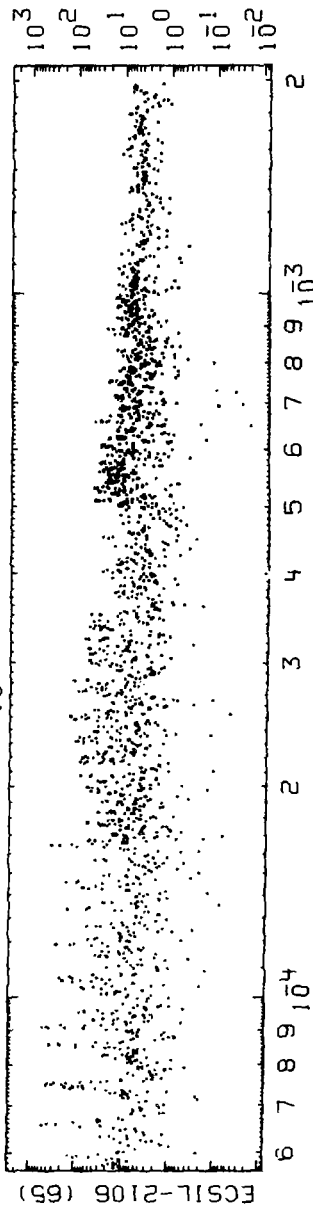
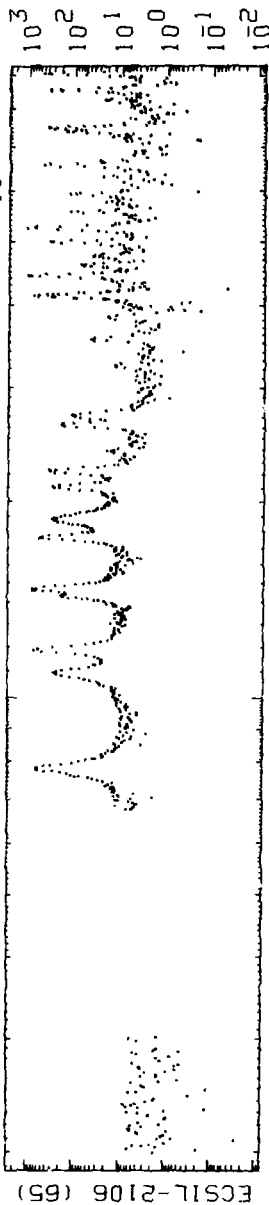
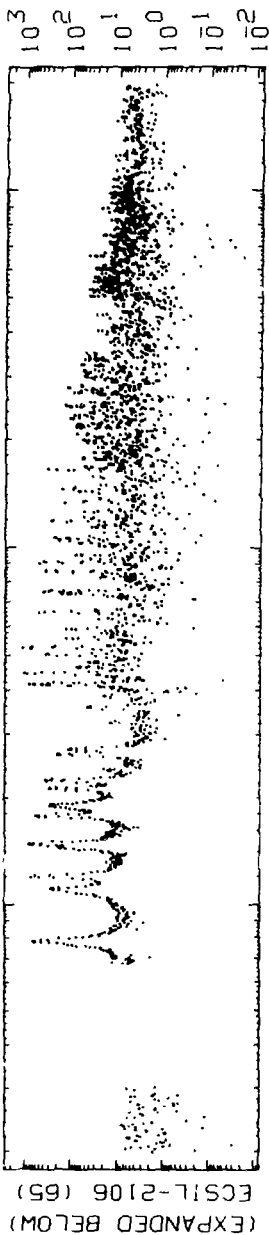


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N, GAMMA

94-PU-239

CROSS SECTION



MEV

11-219

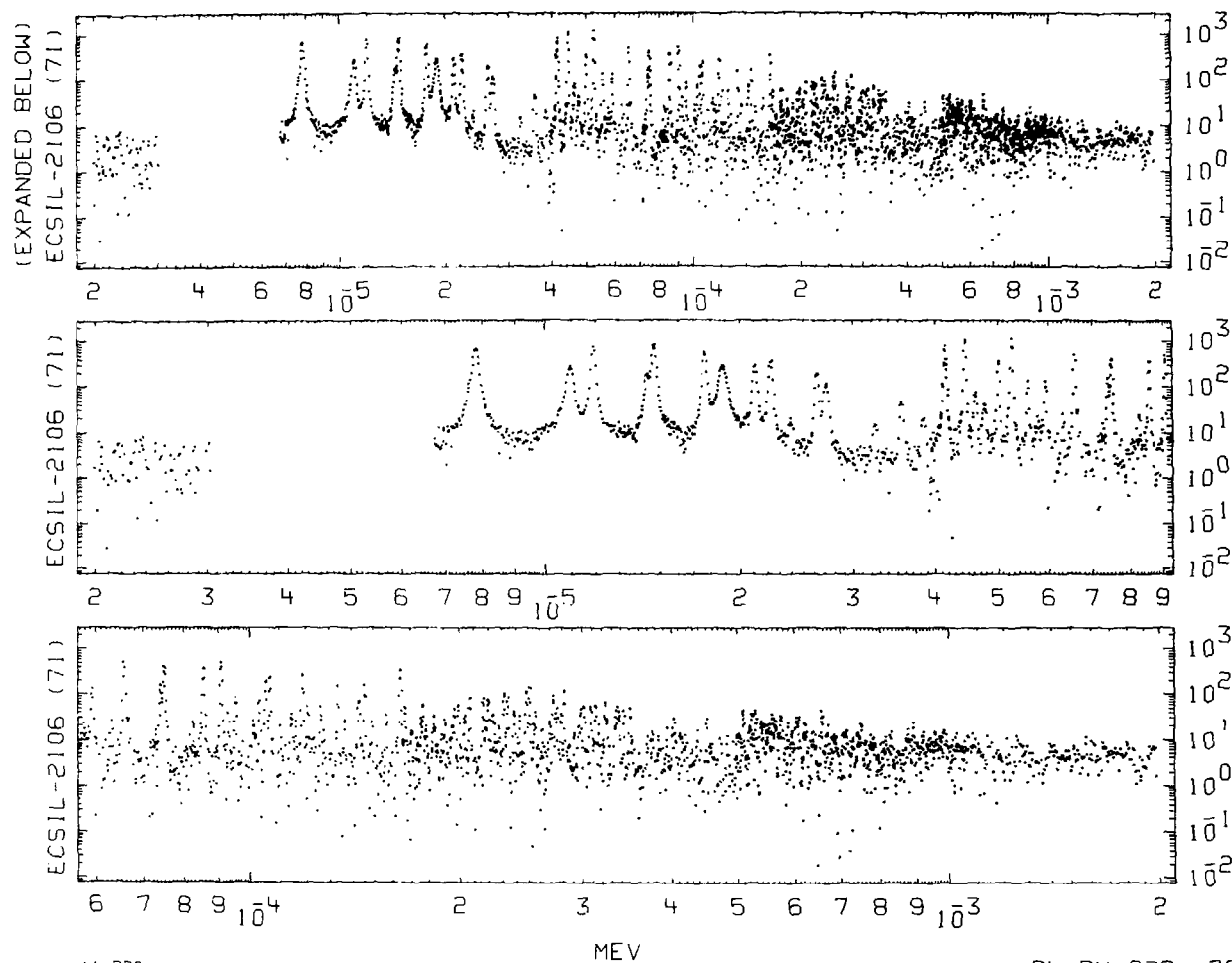
94-PU-239 -29

BARNs

03/01/74

N, GAMMA
CROSS SECTION

94-PU-239



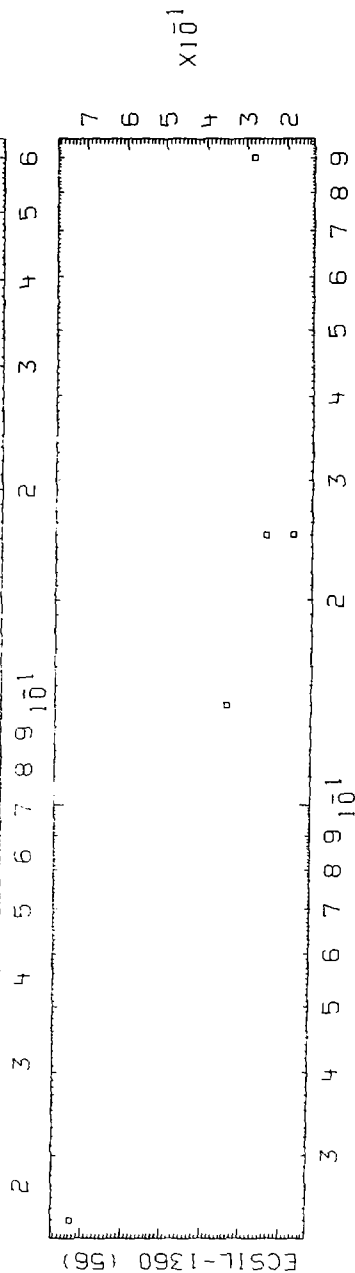
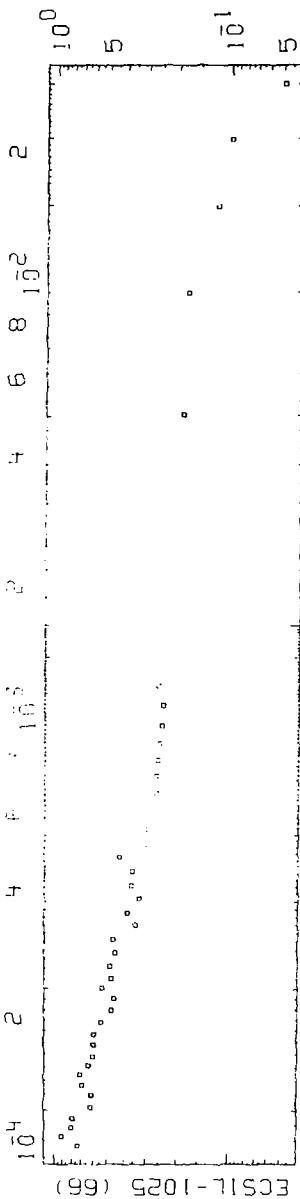
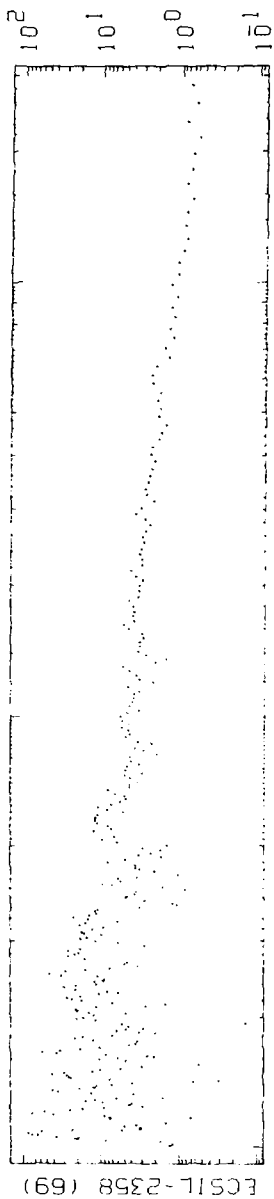
11-220

94-PU-239 -30

03/01/74

94-PU-239

N. GAMMA (ROSS SECTION)



11-221

MEV

94-PU-239 -31

BARNs

$\times 10^{-1}$

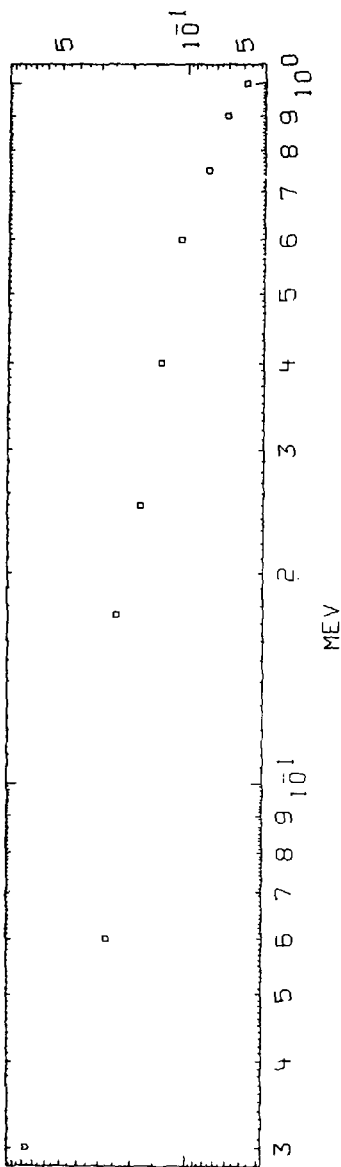
03/01/74

N. GAMMA

94-PU-239

CROSS SECTION

ECSIL-709 (62)



BARNs

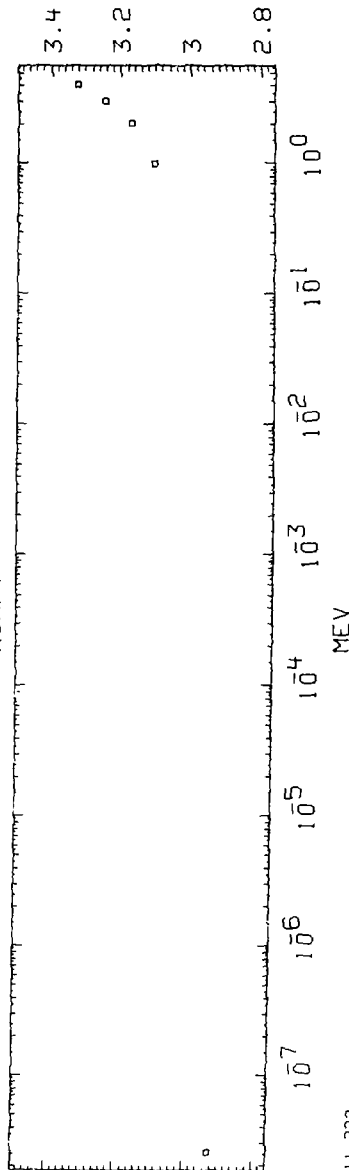
03/01/74

NEUTRONS/FISSION

94-PU-239

PROMPT

ECSIL-1074 (65)



NEUTRONS/FISSION

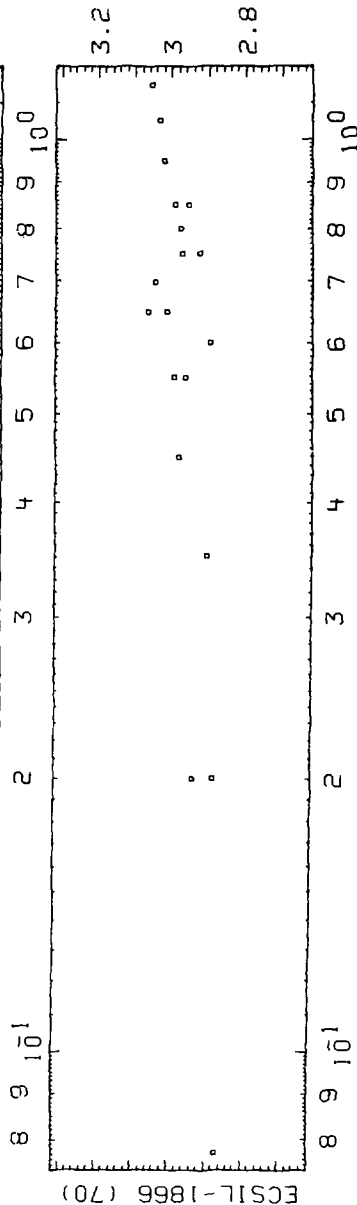
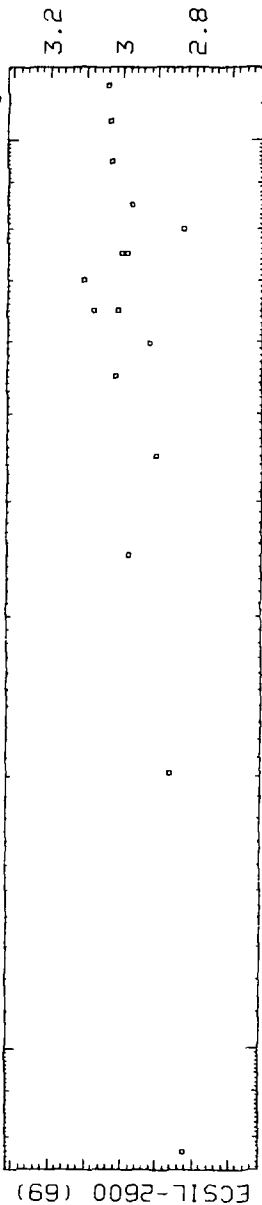
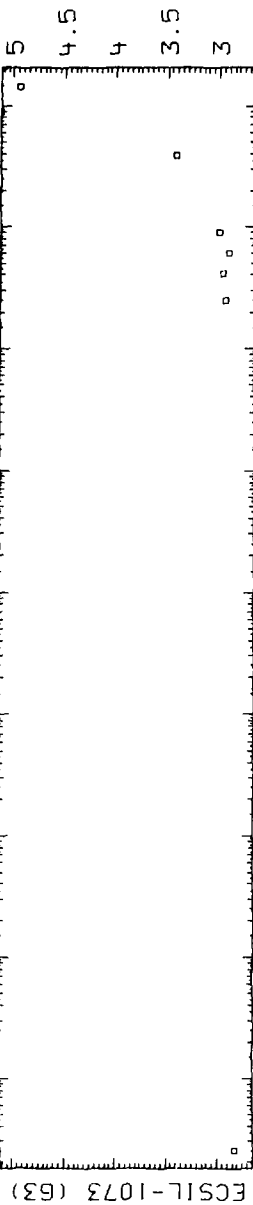
11-222

94-PU-239 -32

03/01/74

NEUTRONS/FISSION
PROMPT

94-PU-239



NEUTRONS/FISSION

11-223

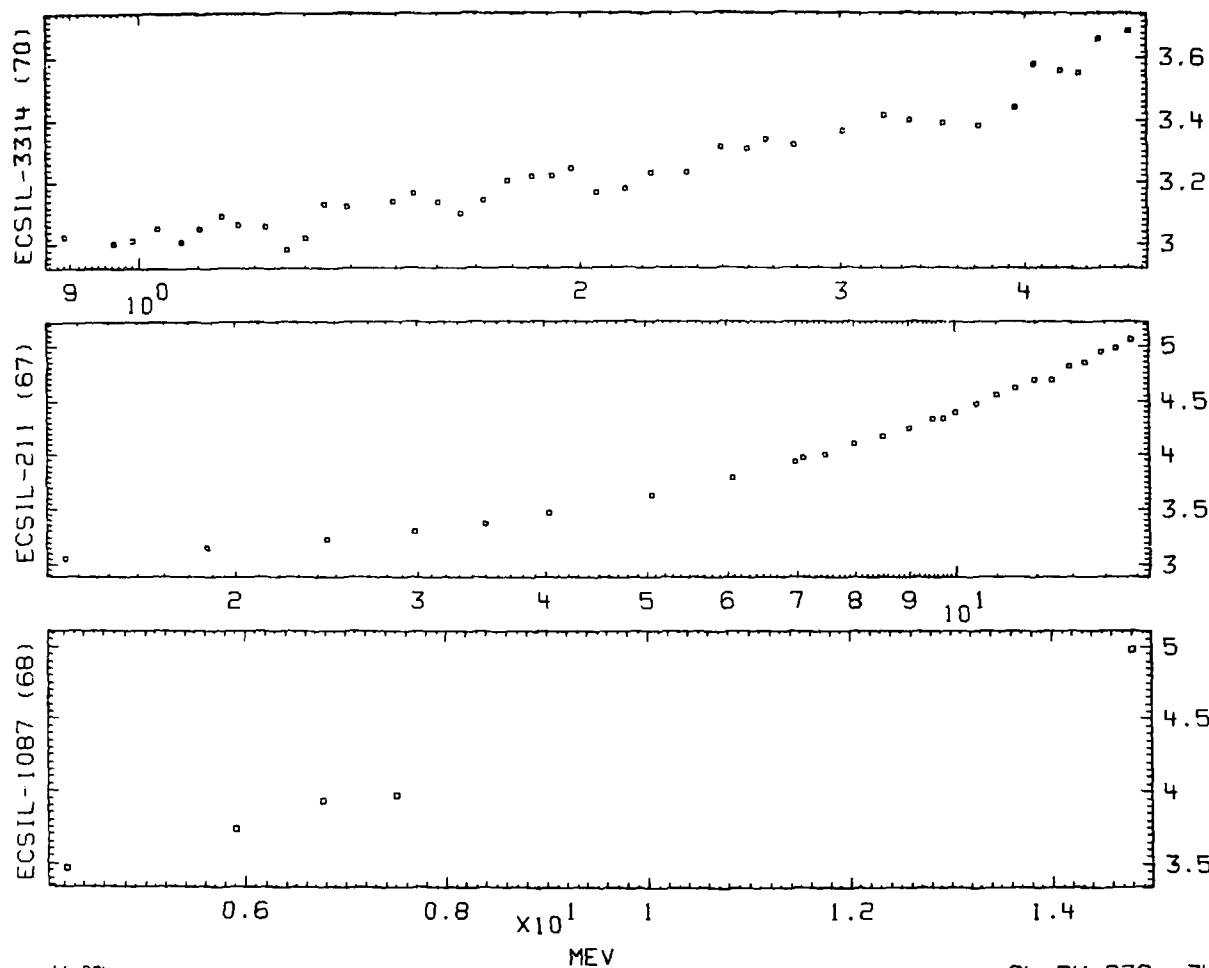
MEV

94-PU-239 -33

03/01/74

NEUTRONS/FISSION
PROMPT

94-PU-239



11-224

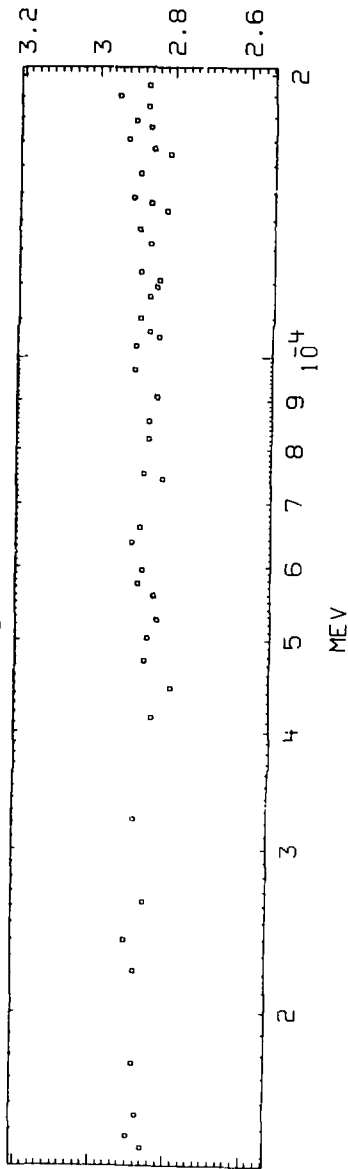
94-PU-239 -34

03/01/74

NEUTRONS/FISSION
PROMPT

94-PU-239

EC51L-3246 (71)



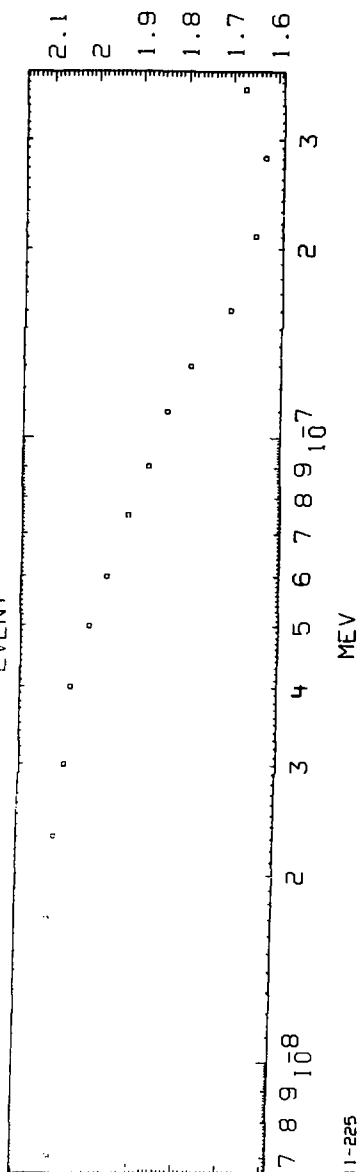
RELATIVE

03/01/74

NEUTRONS/NONELASTIC
EVENT

94-PU-239

EC51L-1390 (68)



RATIO

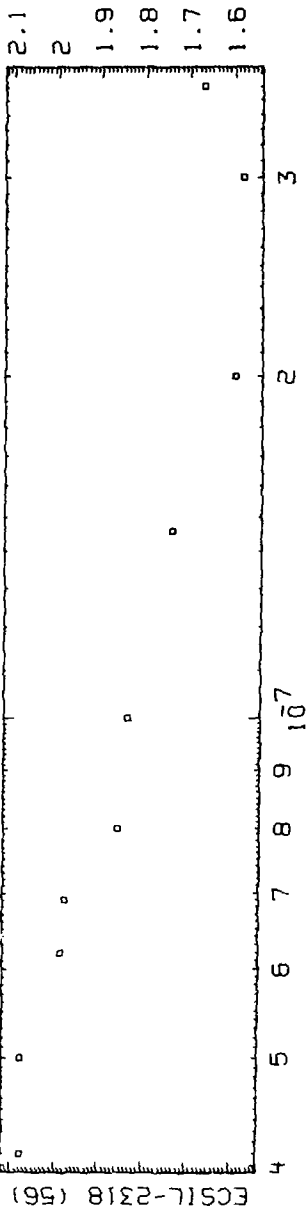
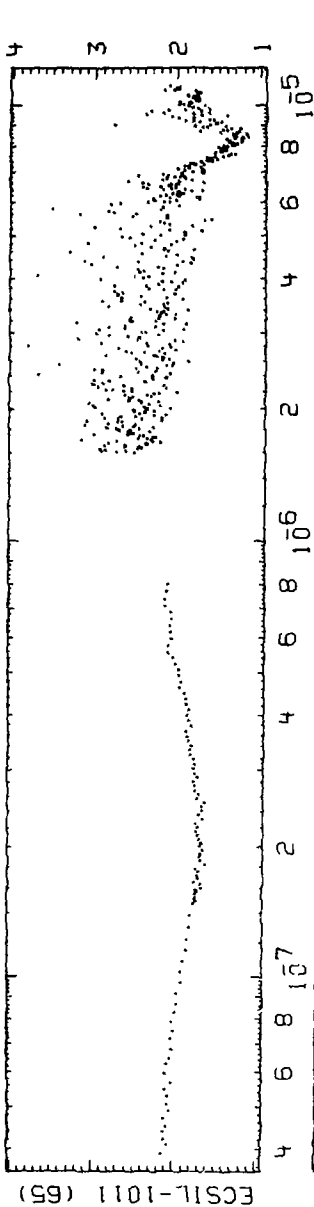
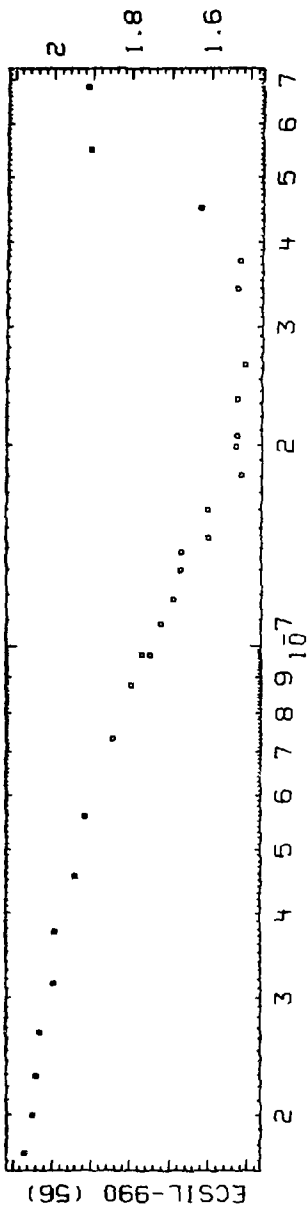
11-225

94-PU-239 -35

03/01/74

NEUTRONS/NONELASTIC
EVENT

94-PU-239



RATIO

11-226

MEV

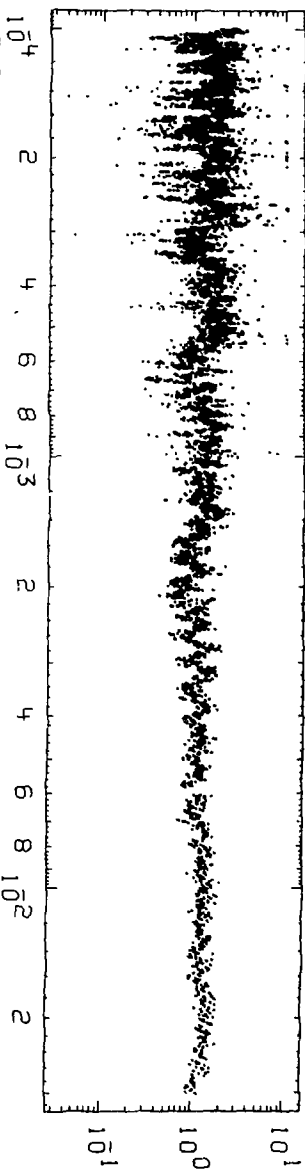
94-PU-239 -36

03/01/74

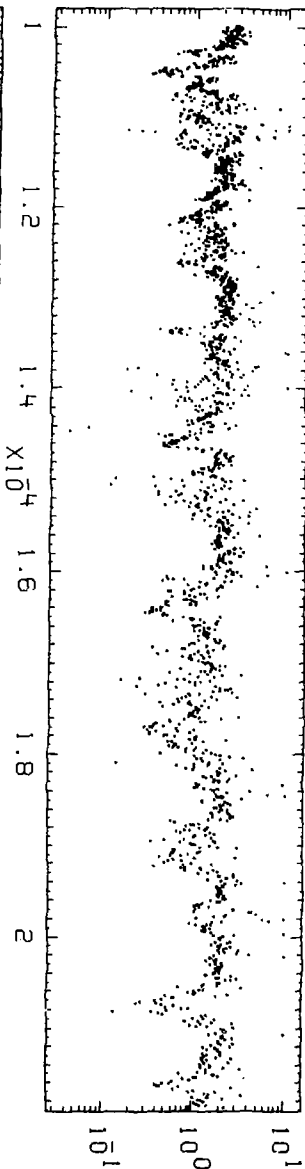
NEUTRONS/NONELASTIC
EVENT

94-PU-239

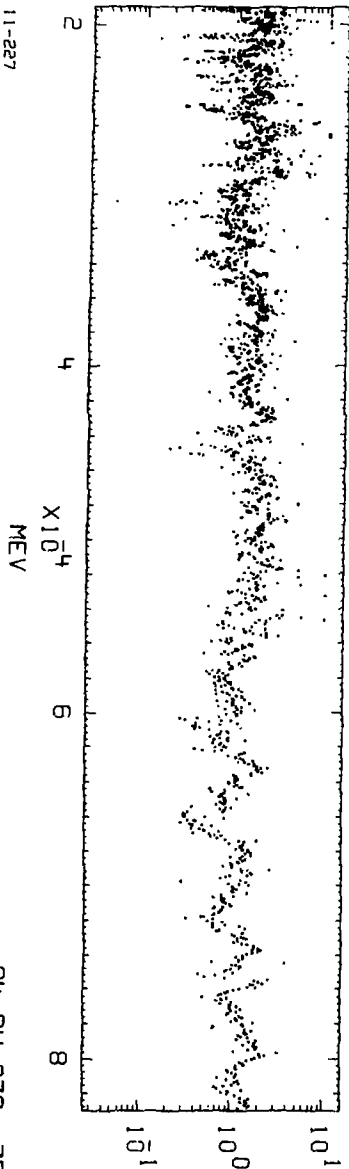
(EXPANDED BELOW)
ECSIL-1080 (68)



ECSIL-1080 (68)



ECSIL-1080 (68)



RATIO

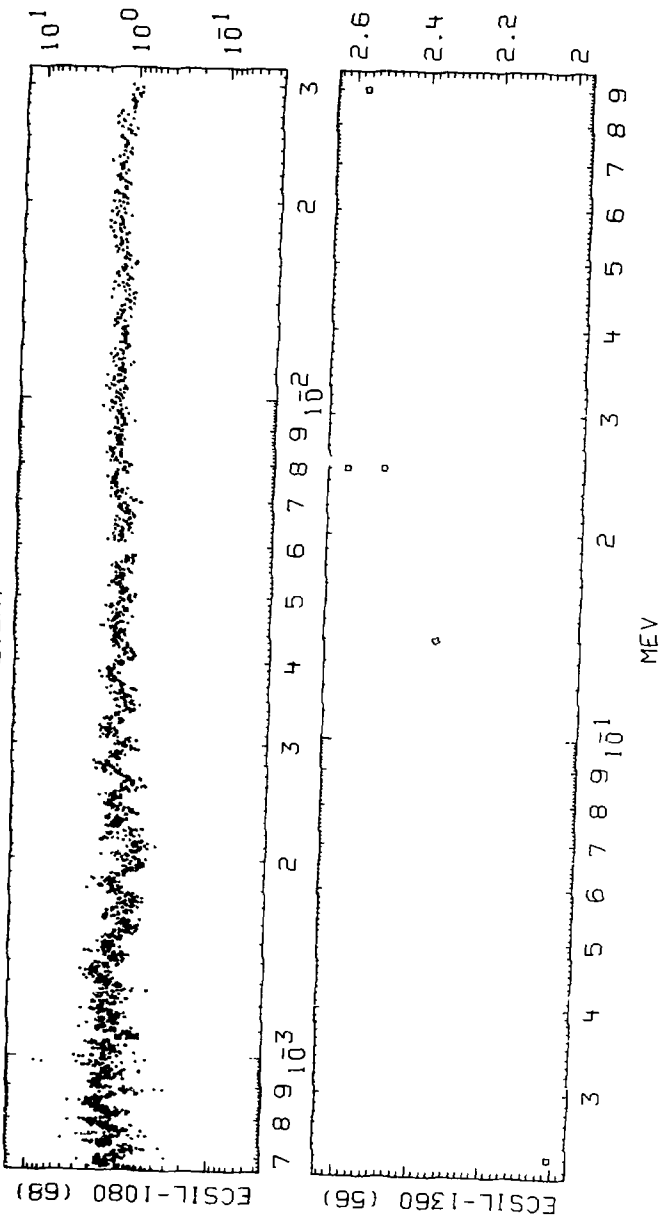
11-227

94-PU-239 -37

03/01/74

NEUTRONS/NONELASTIC
EVENT

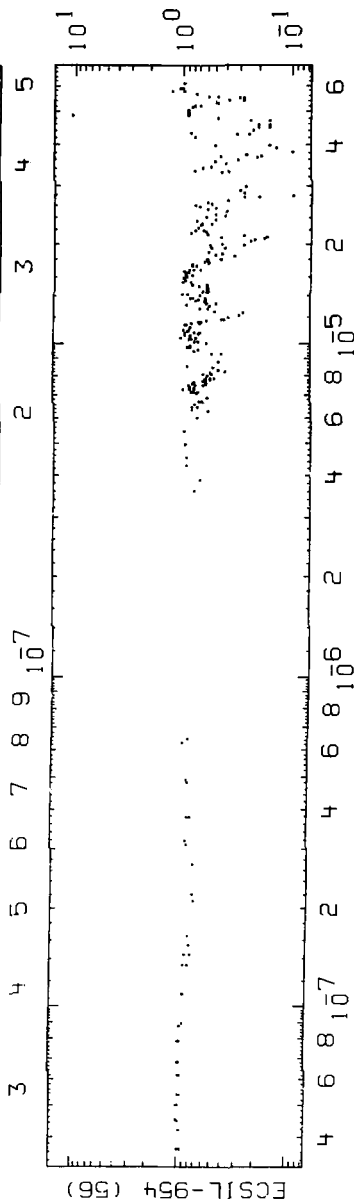
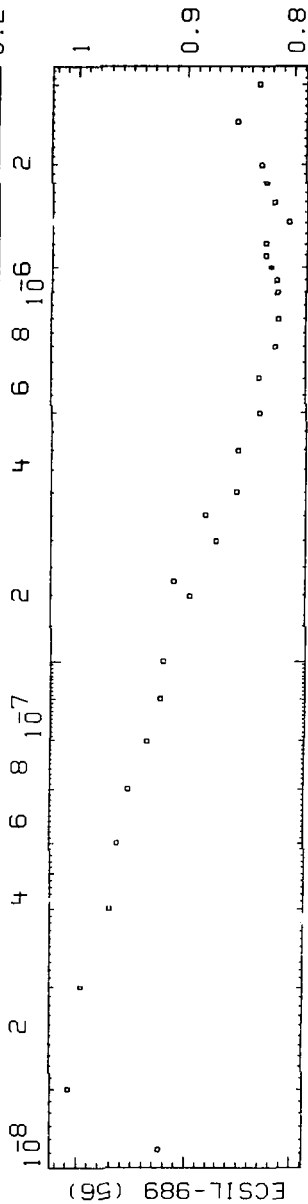
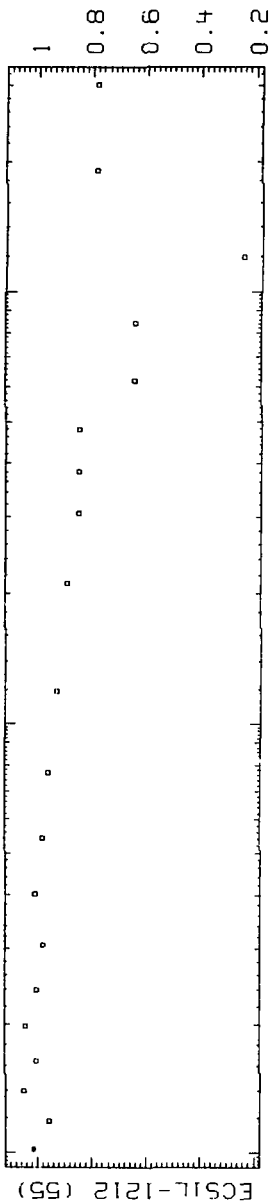
94-PU-239



03/01/74

NEUTRONS/NONELASTIC
EVENT

94-PU-239

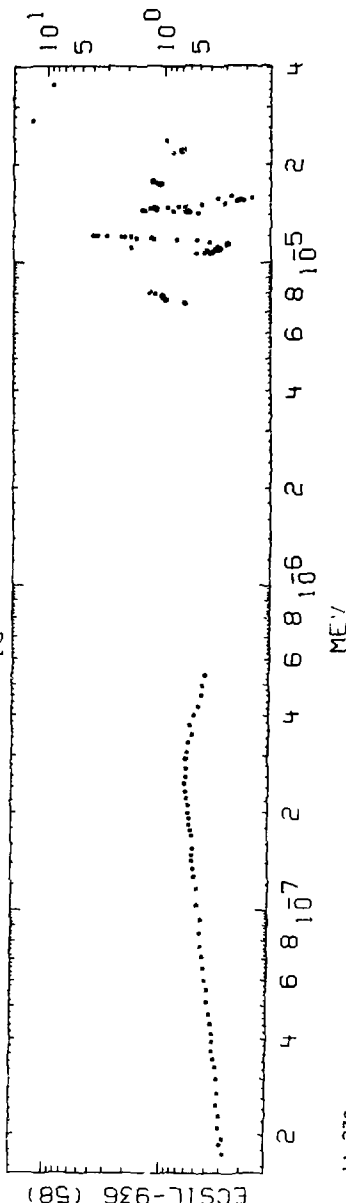
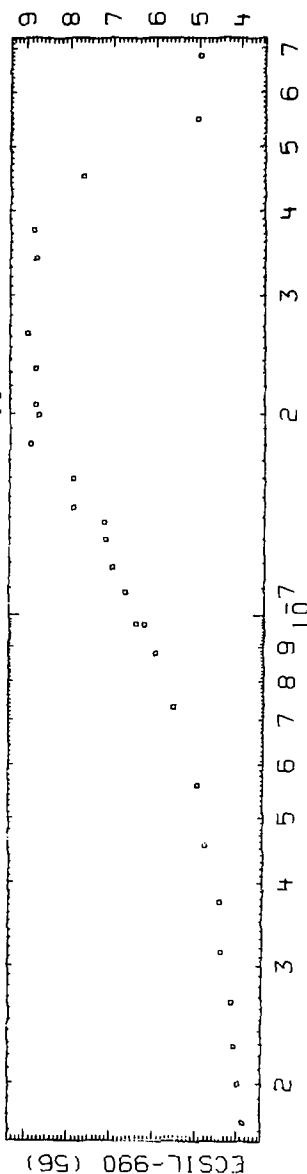
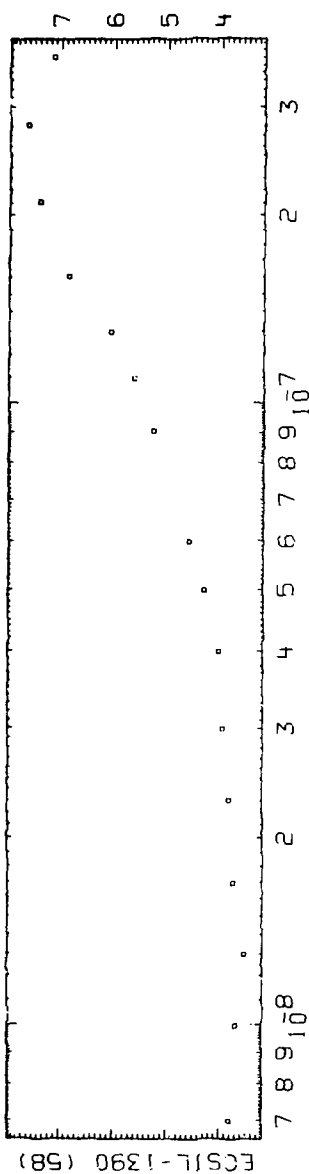


RELATIVE

03/01/74

CAPTURE/FISSION
RATIO

94-PU-239



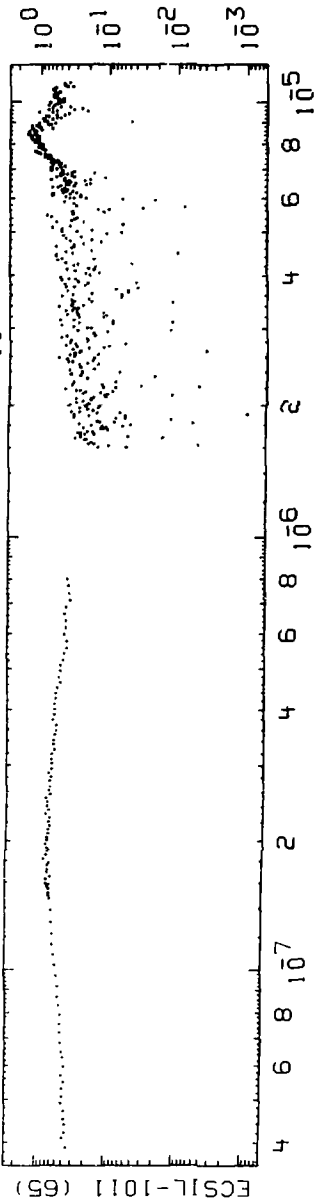
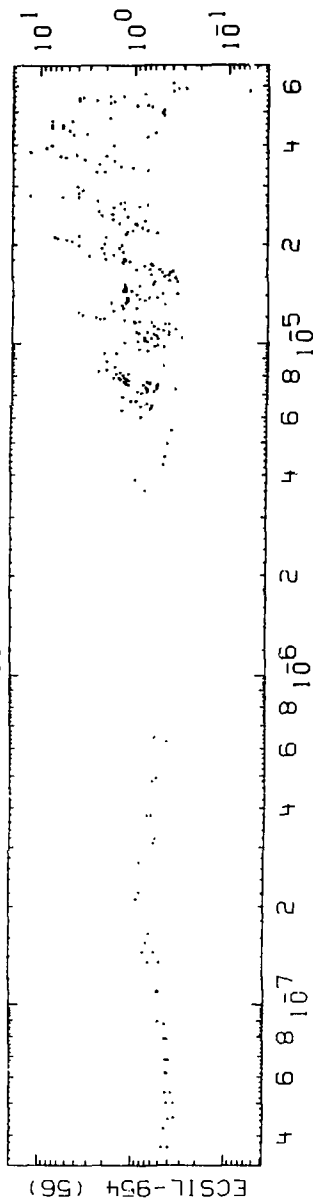
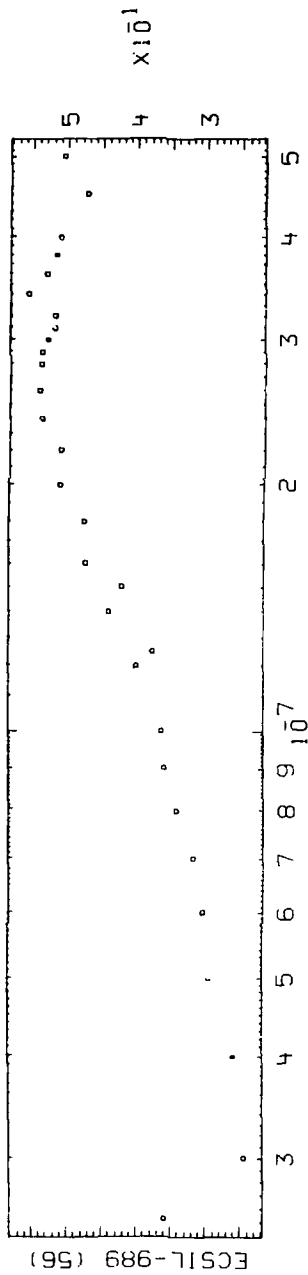
11-230

94-PU-239 -40

03/01/74

CAPTURE/FISSION
RATIO

94-PU-239



11-231

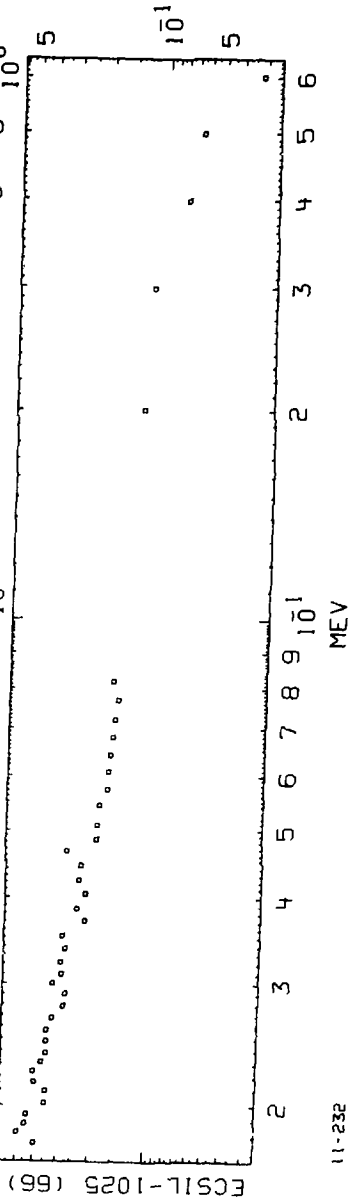
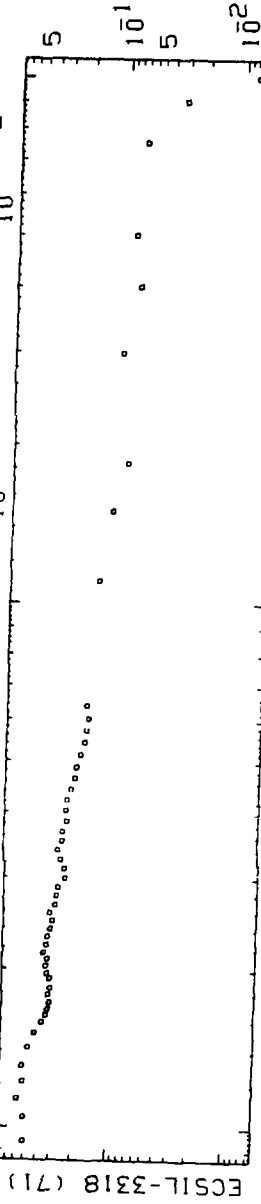
MEV

94-PU-239 -41

03/01/74

CAPTURE/FISSION RATIO

94-PU-239



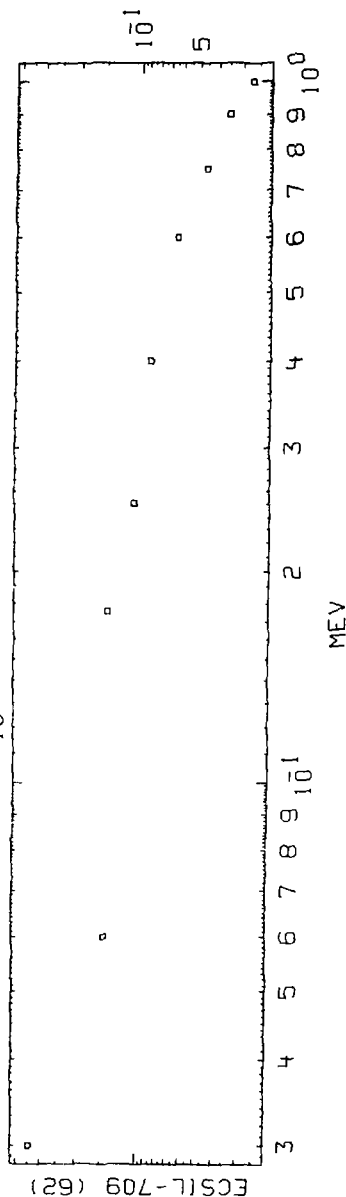
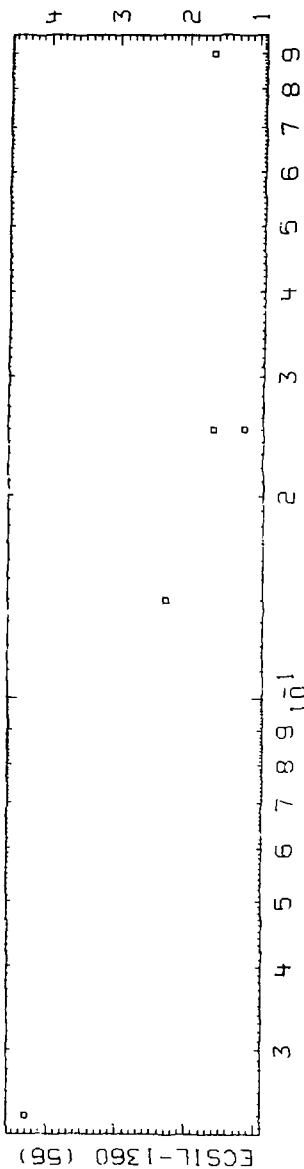
11-232

94-PU-239 -42

03/01/74

CAPTURE/FISSION
RATIO

94-PU-239



03/01/74

TOTAL

94-PU-239

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
45	1246	2.5300 - 8	1.0450 + 3	1.0000 + 1
54	6	1.5000 - 3	1.8500 + 1	1.1500 + 1
54	6	1.6000 - 1		
54	6			

11-233

94-PU-239 -43

03/01/74

ELASTIC
CROSS SECTION

94-PU-239

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
57 4			00+ 0		57 444 1.0000+ 0			4.1000+ 0	
56 149 5.000- 0		10- 2	6.1010+ 0	6.0010- 1	56 149 1.0000+ 0	5.0000- 2		4.1000+ 0	4.0000- 1

03/01/74

FISSION

94-PU-239

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
68 200 2.5300- 8			7.4200+ 2	6.7000+ 0	56 1199 2.5300- 8			7.1500+ 2	1.5000+ 1
66 1356 2.5300- 8			7.1570+ 2	1.2750+ 1	58 1164 2.5300- 8			7.4100+ 2	5.0000+ 0
66 1356 2 70- 8	1.7710-10		7.2670+ 2	1.2750+ 1	70 3291 2.5300- 8			7.4100- 1	7.0000- 3
66 1356 2.5300- 8			7.4000+ 2	1.4490+ 1	57 1181 1.0000- 7			4.5300+ 2	1.4000+ 1
57 1391 2.5300- 8			7.1280+ 2	2.8510+ 1	68 2095 2.0000- 3	4.0000- 4		3.5000+ 0	
66 1311 2.5300- 8			7.5100+ 2	1.0000+ 1	65 1072 2.4000- 2			1.6600+ 0	7.0000- 3
57 1181 2.5300- 8			6.8000+ 2		50 1413 1.4000+ 1			1.7500+ 0	9.0000- 2
59 1176 2.5300- 8			7.0400+ 2		56 771 1.4100+ 1			2.5800+ 0	9.0010- 2

03/01/74

N, GAMMA

94-PU-239

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 1131 2.5300- 8			2.7500+ 2	1.5000+ 1	65 1342 2.4000- 2			5.9120- 1	6.7760- 2
63 1453 2.5300- 8			2.6600+ 2	8.0000+ 0	58 1338 2.4000- 1			4.5520- 2	6.6510- 2
58 1328 2.4000- 2			5.4990- 1	7.2380- 2					

03/01/74

PROMPT NEUTRONS/FISSION

94-PU-239

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
56 1065 2.5300- 8			2.8600+ 0	1.8000- 1	58 1063 2.5300- 8			2.8870+ 0	2.8970- 2
44 1318 2.5300- 8			2.8670+ 0		59 1092 2.5300- 8			2.9690+ 0	2.4140- 2
44 1380 2.5300- 8			2.8490+ 0	2.4140- 2	65 1095 2.5300- 8			2.8530+ 0	1.9310- 2
55 1097 2.5300- 8			3.0000+ 0	1.2000- 1	67 1417 2.5300- 8			2.9040+ 0	8.0000- 3
55 1098 2.5300- 8			2.8730+ 0	2.4140- 2	58 1172 2.5300- 8			3.0200+ 0	6.3420- 2
55 1099 2.5300- 8			2.8600+ 0	1.8000- 1	58 1447 2.5300- 8			2.8970+ 0	4.9740- 2
58 1063 2.5300- 8			2.8800+ 0	3.2330- 2	56 1145 8.0000- 2			3.0480+ 0	7.9000- 2
59 1063 2.5300- 8			2.8900+ 0	2.4000- 2	56 149 5.0000- 1			3.2300+ 0	4.9700- 1

03/01/74

NEUTRONS/FISSION

94-PU-239

PROMPT

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
56	149 1.0000+ 0		3.2950+ 0	5.0700- 1	61	1269 1.400+ 1		4.6200+ 0	2.8000- 1
55	1383 4.0000+ 0		3.6600+ 0	4.0000- 1	56	1321 1.4100+ 1		4.8500+ 0	5.0000- 1
56	1121 4.0000+ 0	3 0000- 1	3.4300+ 0	1.1000- 1	60	1375 1.4200+ 1		4.7500+ 0	4.0000- 1
55	1383 4.5000+ 0		3.6600+ 0	4 0000- 1	58	1121 1.5000+ 1	5.0000- 1	4.7100+ 0	2.0000- 1

03/01/74

DELAYED NEUTRONS/FISSION

94-PU-239

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
47	1420 2.5000- 8		6.8800- 3	1.1200- 3	1	55 1341 2.0000+ 0	1.0000+ 0	6.2880- 3	4.0000- 4
47	1418 2.5000- 8		7.3600- 3	3.2000- 4	59	1533 3.1000+ 0	2.0000- 1	6.9000- 3	7.0000- 4
47	1419 2.5000- 8		8.0000- 3		61	1423 1.4500+ 1		1.3000- 2	1.5000- 3
57	1056 2.5000- 8		6.1000- 3	3.0000- 4	69	1533 1.4900+ 1	5.0000- 1	4.3000- 3	4.0000- 4
71	3159 2.5000- 8		6.6000- 3	6.0000- 4					

03/01/74

NEUTRONS/NONELASTIC EVENT

94-PU-239

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA	REFERENCE	ENERGY MEV	RATIO	DELTA
65	1076 2.5000- 8		2.1080+ 0 8.0000- 3		65	1076 5.7000- 8		2.0340+ 0 9.0000- 3
55	1098 2.5000- 8		1.9000+ 0 7.0000- 2		58	1338 2.4000- 2		2.1700+ 0 7.0000- 2
67	1523 2.5300- 8		2.1190+ 0 1.6000- 2		65	1342 2.4000- 2		2.1500+ 0 6.0000- 2
62	1296 2.5300- 8		2.1430+ 0 2.0000- 2		58	1338 2.4000- 1		2.8200+ 0 1.2000- 1
59	1285 2.5300- 8		2.0400+ 0 4.0000- 2		58	1338 8.8000- 1		3.0000+ 0 1.9000- 1
70	1289 2.5300- 8		2.1060+ 0		61	1269 1.4000+ 1		4.5300+ 0 2.5000- 1

03/01/74

CAPTURE/FISSION
RATIO

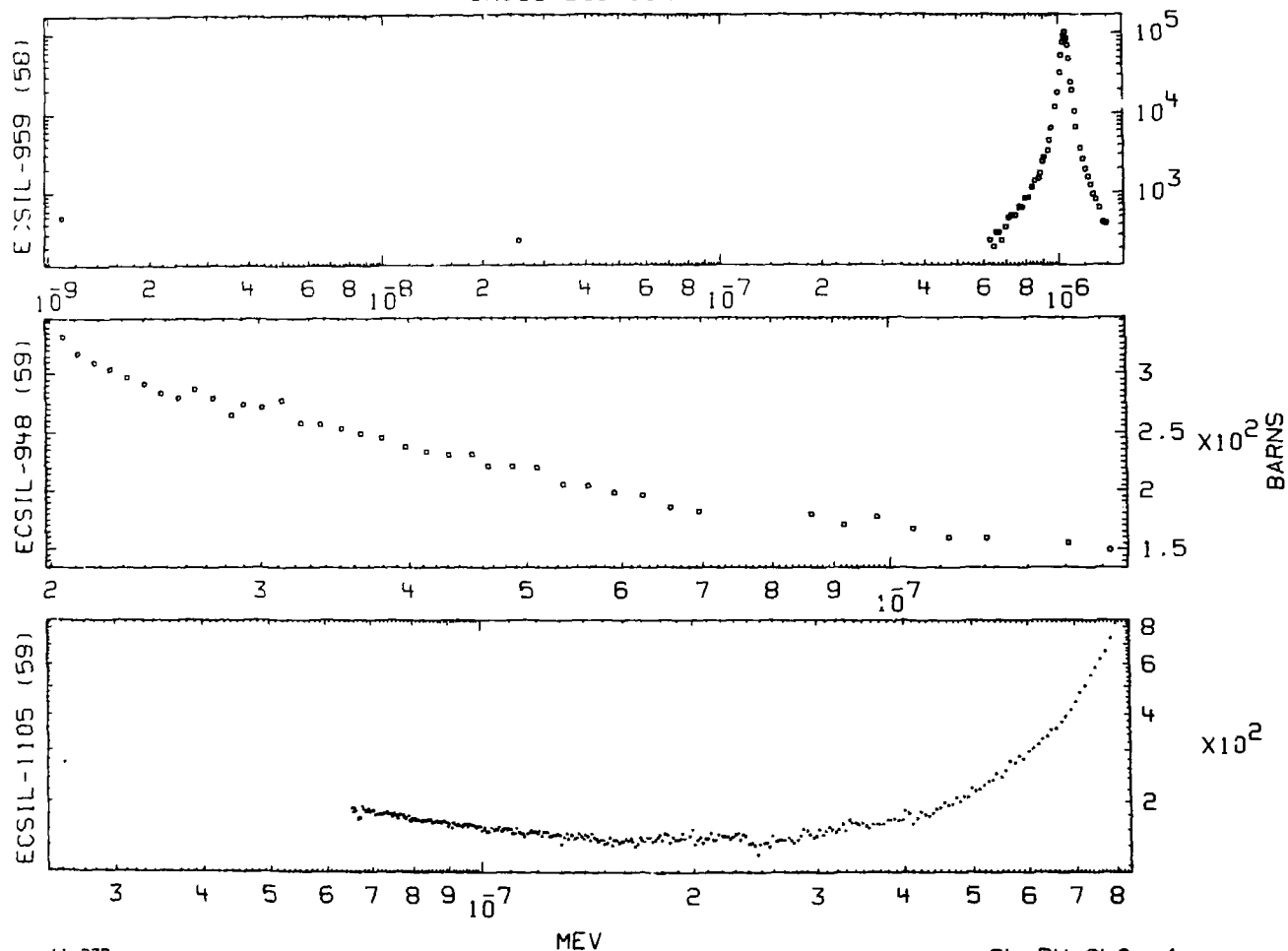
94-PU-239

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
58 1280	1.1000-9		3.0000-	1 4.0000-2
55 1099	2.5000-8		5.1110-	1 5.5670-2
65 1076	2.5000-8		3.6200-	1 5.1690-3
67 1523	2.5300-8		3.5490-	1 1.0400-2
66 1131	2.5300-8		3.7700-	1 2.3000-2
59 1285	2.5300-8		4.0740-	1 2.7600-2
62 1289	2.5300-8		3.7900-	1 3.5770-2
62 1296	2.5300-8		3.3970-	1 1.2500-2
66 1311	2.5300-8		3.6000-	1 6.0000-3
66 1312	2.5300-8		3.5600-	1 7.0000-3
70 2915	2.5300-8		3.5970-	1 2.1000-3
65 1076	5.7000-8		4.1150-	1 6.2460-3
58 1338	2.4000-2		3.2460-	1 4.2730-2
65 1342	2.4000-2		3.4900-	1 4.0000-2
58 1338	2.4000-1		3.0000-	2 4.3830-2

03/01/74

TOTAL
CROSS SECTION

94-PU-240



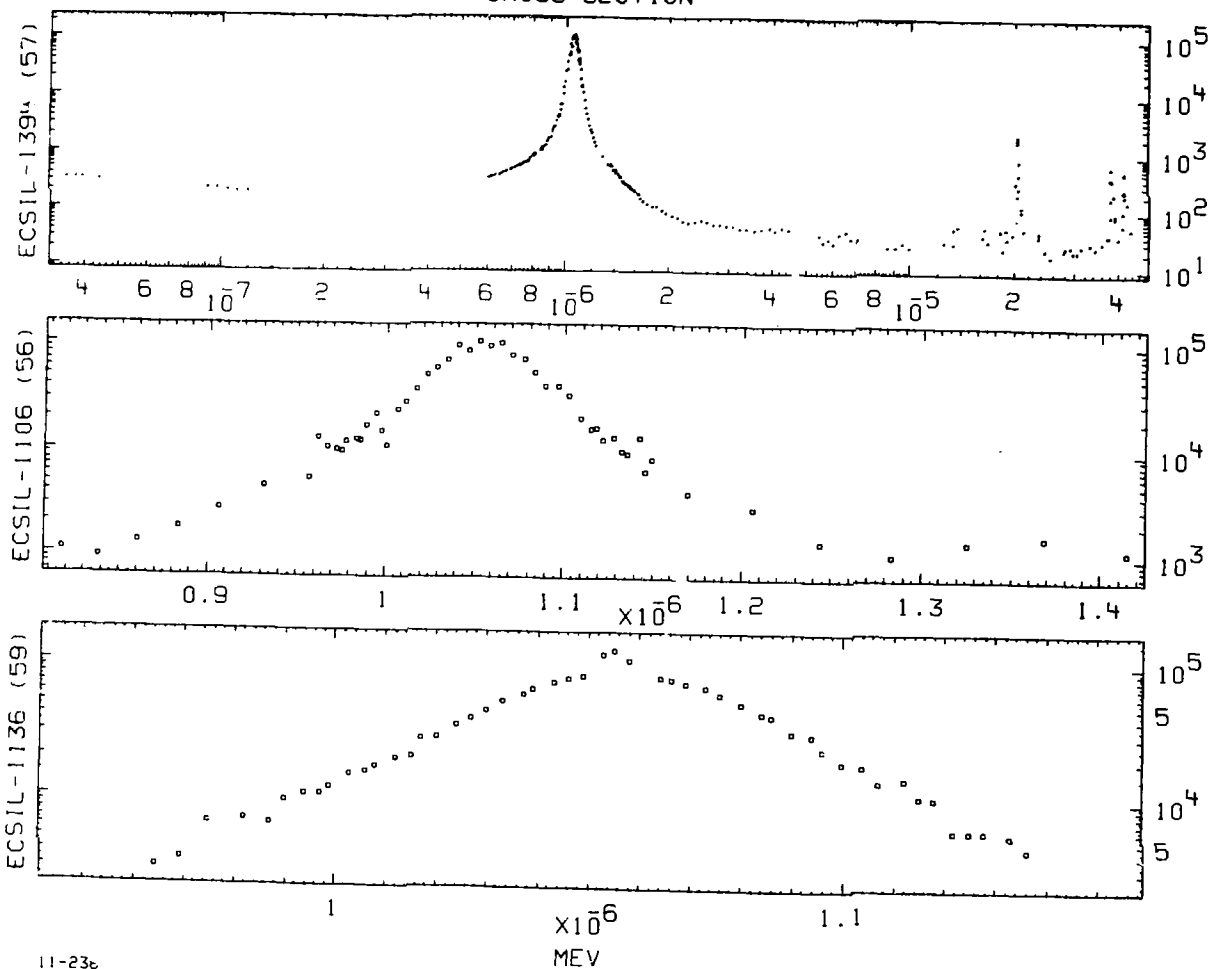
11-237

94-PU-240 -1

03/01/74

TOTAL
CROSS SECTION

94-PU-240



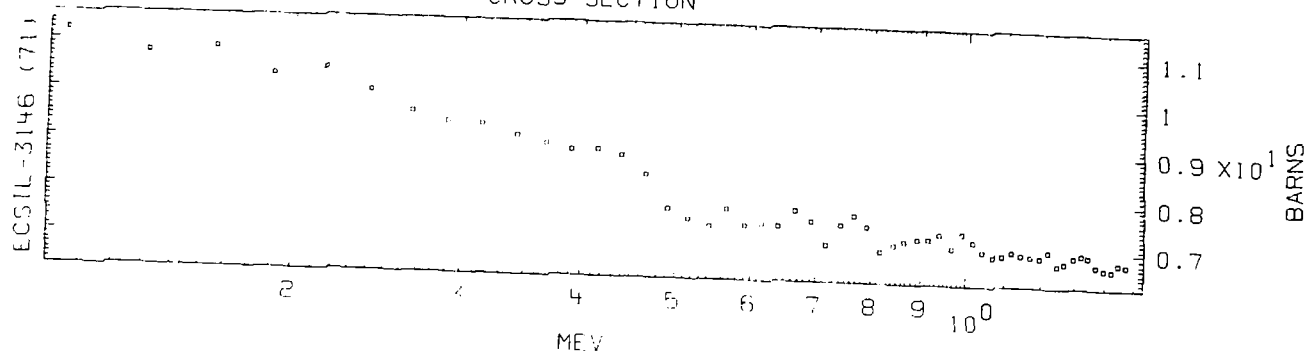
11-236

94-PU-240 -2

03/01/74

TOTAL
CROSS SECTION

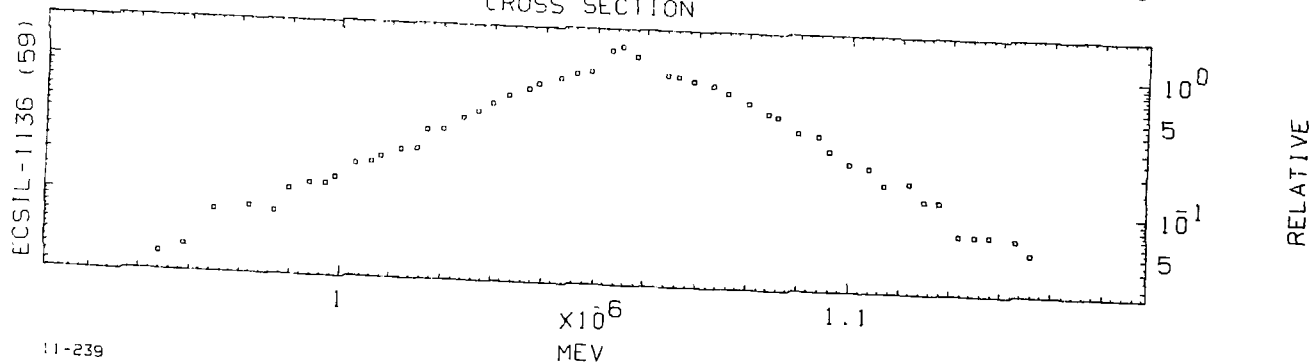
94-PU-240



03/01/74

TOTAL
CROSS SECTION

94-PU-240



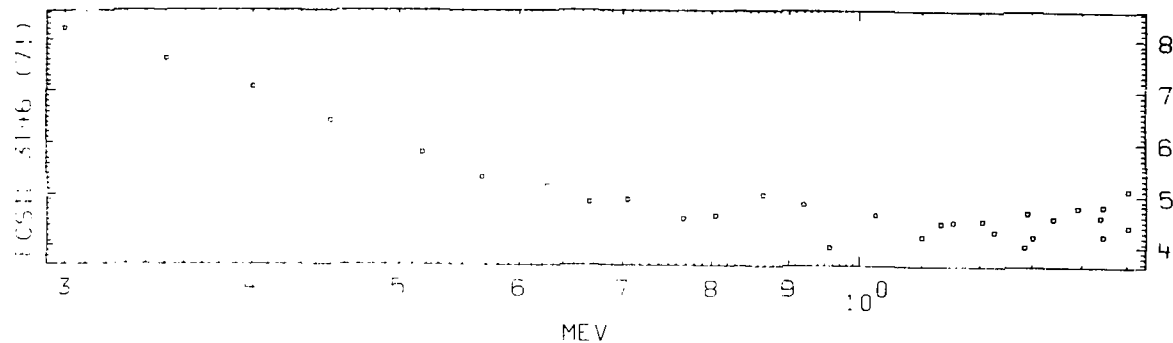
11-239

94-PU-240 -3

03/01/74

ELASTIC
CROSS SECTION

94-PU-240

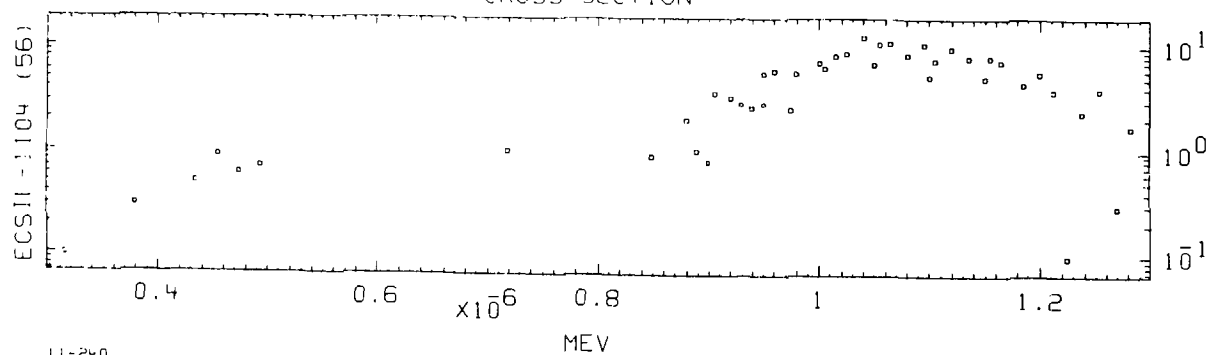


BARNs

03/01/74

FISSION
CROSS SECTION

94-PU-240



BARNs

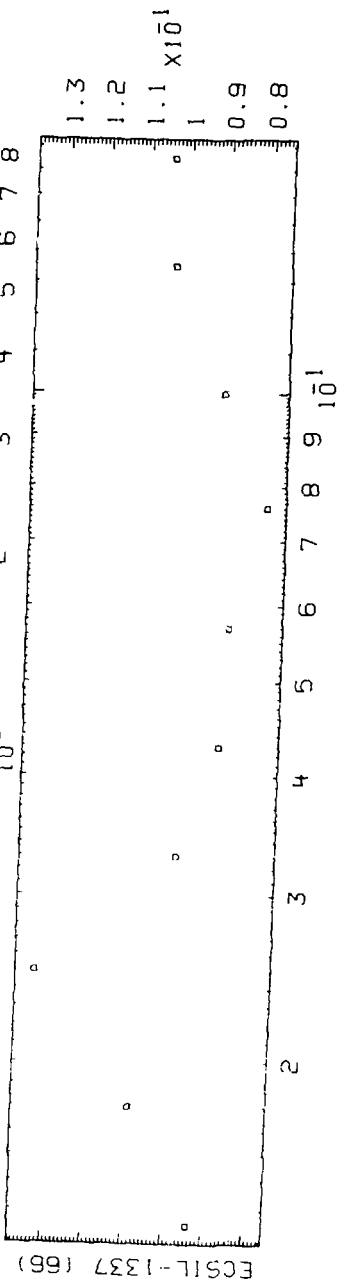
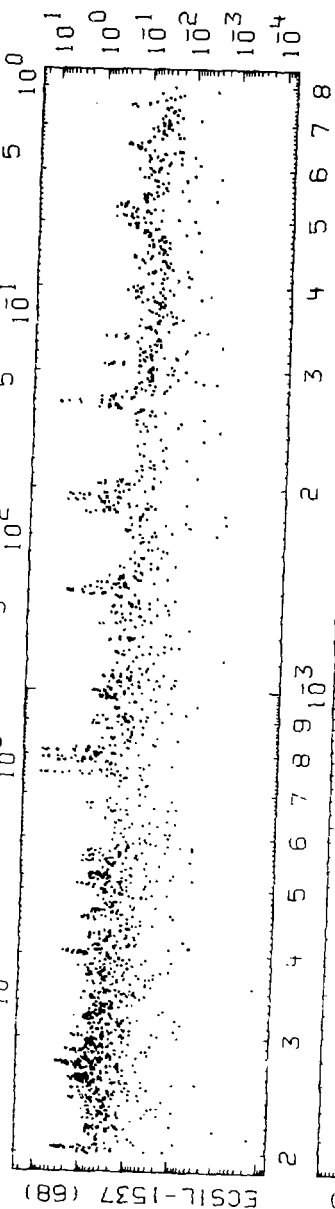
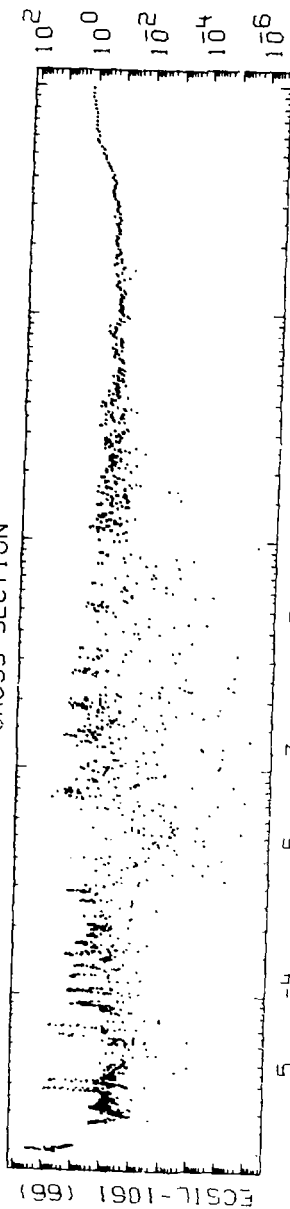
11-240

94-PU-240 -4

03/C1/74

FISSION CROSS SECTION

94-PU-240



BARNs

11-241

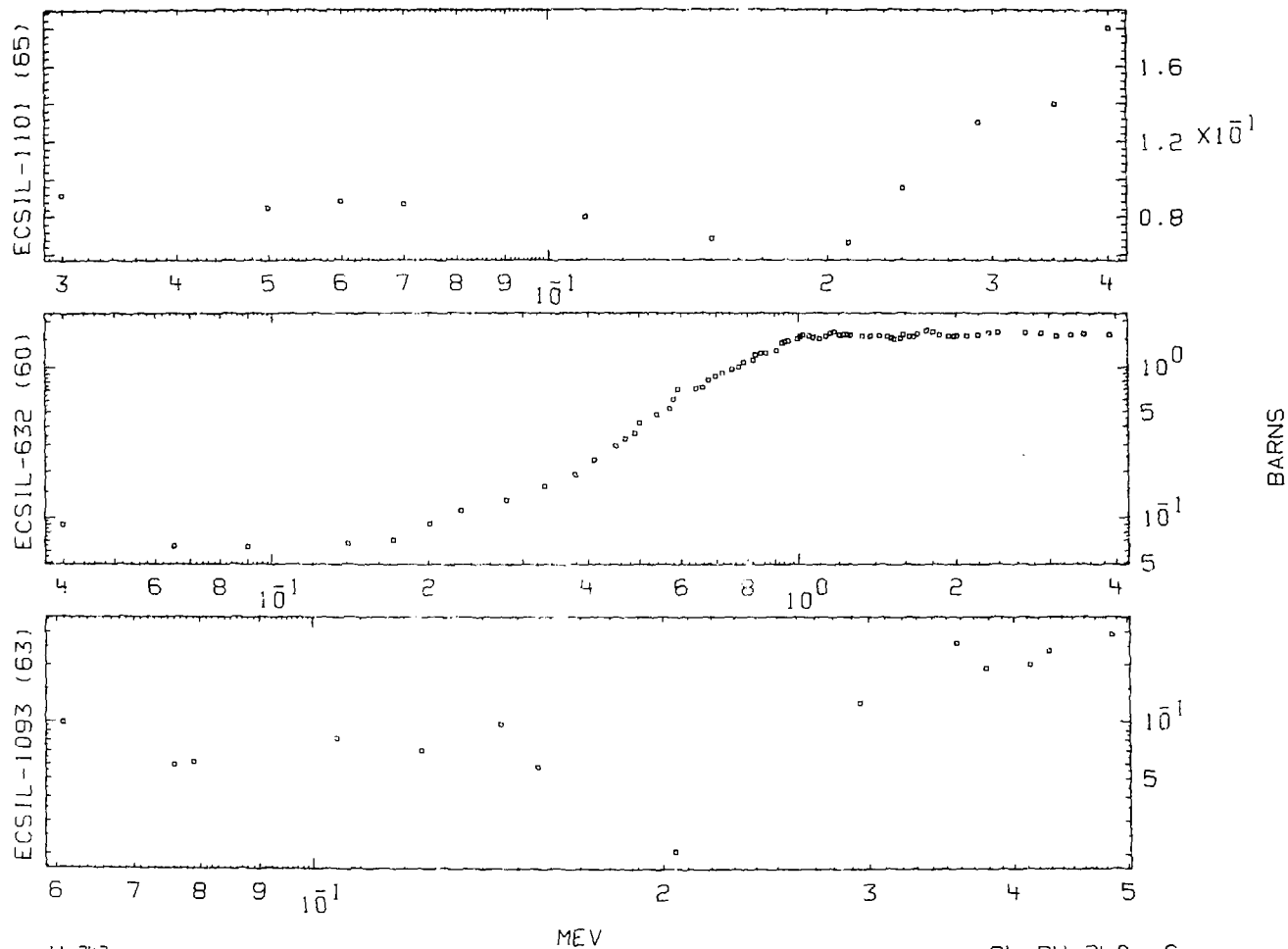
MEV

94-PU-240 -5

03/01/74

FISSION
CROSS SECTION

94-PU-240



11-242

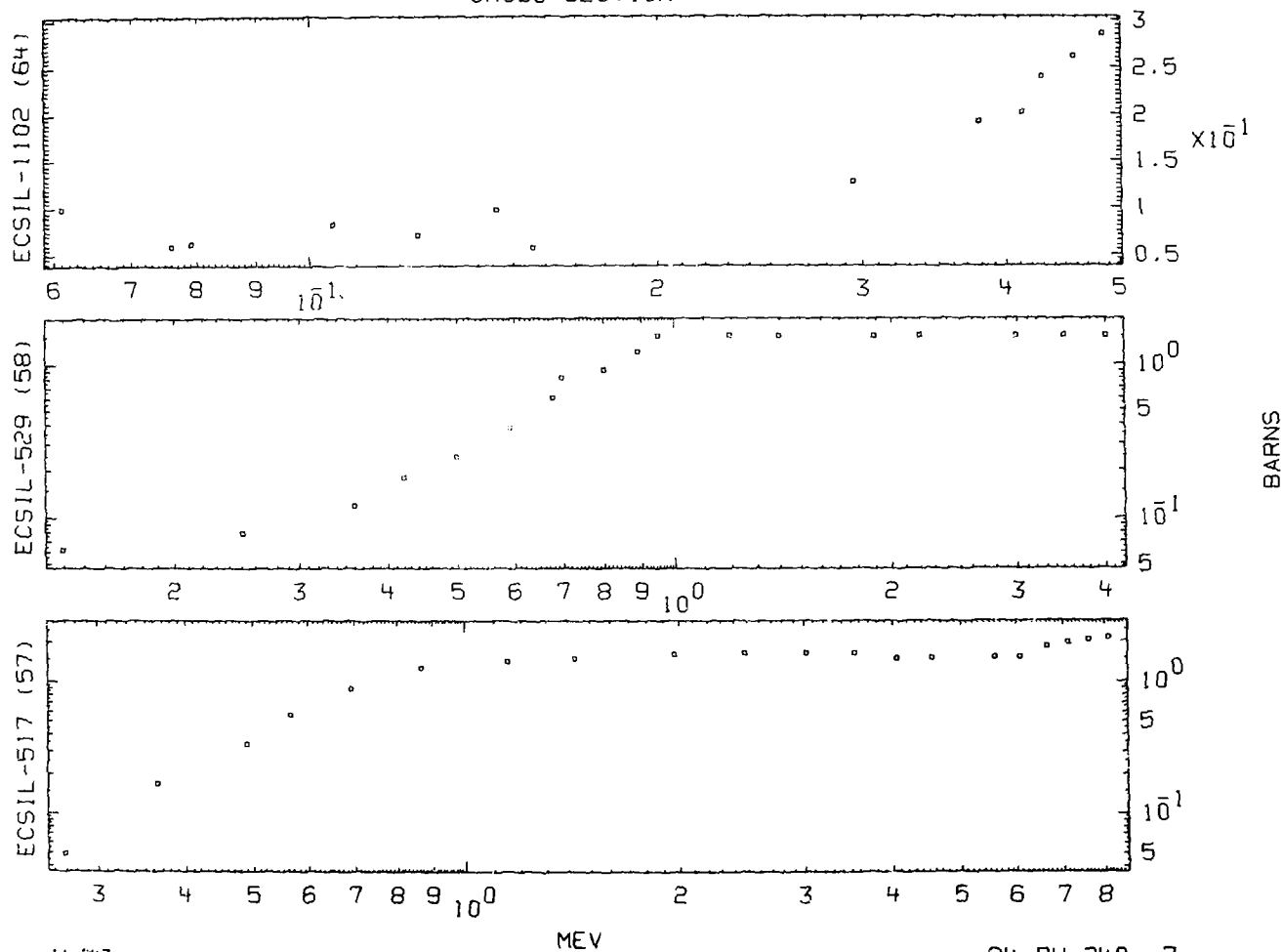
MEV

94-PU-240 -6

03/01/74

FISSION
CROSS SECTION

94-PU-240



11-243

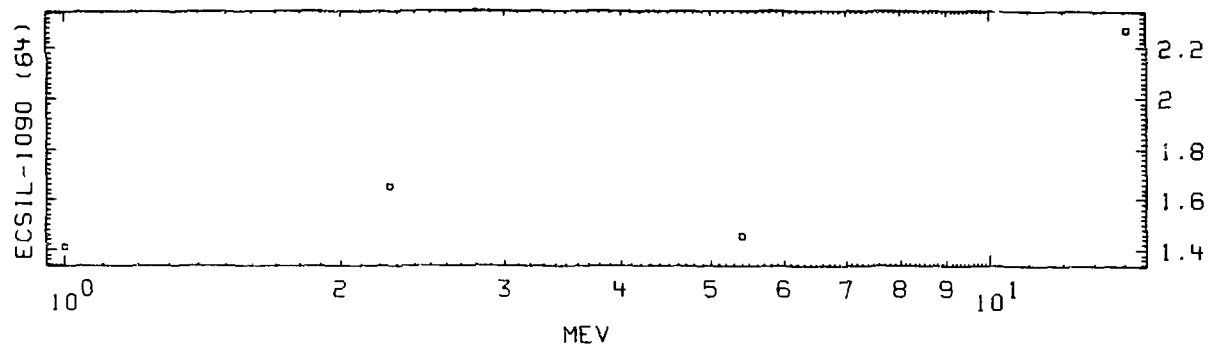
MEV

94-PU-240 -7

03/01/74

FISSION
CROSS SECTION

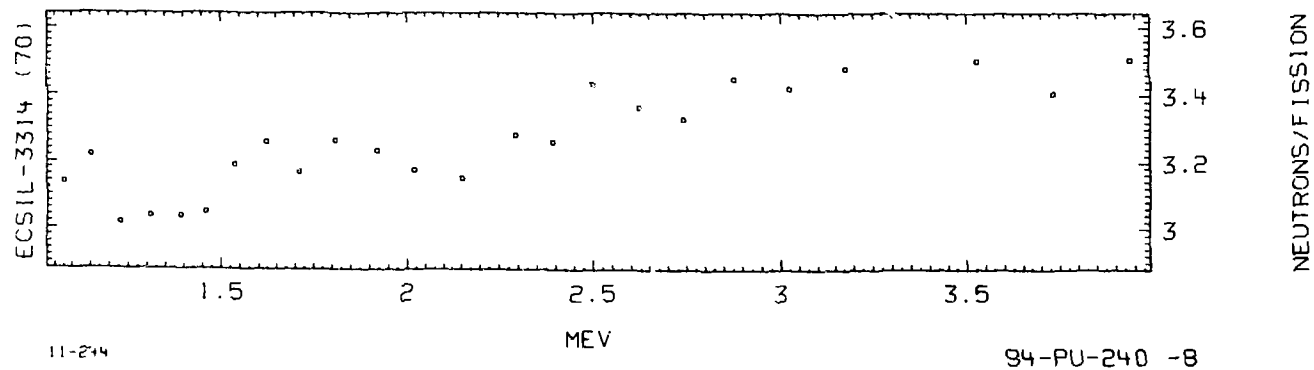
94-PU-240



03/01/74

NEUTRONS/FISSION
PROMPT

94-PU-240



03/01/74

FISSION
CROSS SECTION

94-PU-240

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
56 1199	2.5300- 8		3.7000+ 0 8.0000+ 0	
58 1163	2.5300- 8		3.0000- 2 4.5000- 2	
65 1072	2.4000- 2		1.0600- 1 1.8000- 2	
60 635	2.5000+ 0		1.6000+ 0 3.0000- 1	
60 635	1.4600+ 1		2.4000+ 0 3.0000- 1	

03/01/74

N, GAMMA

94-PU-240

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 1131	2.5300- 8		2.7300+ 2 1.4000+ 1	
60 1171	2.5300- 8		2.7000+ 2 1.7000+ 1	
70 2915	2.5300- 8		2.8950+ 2 1.4000+ 0	

03/01/74

PROMPT NEUTRONS/FISSION

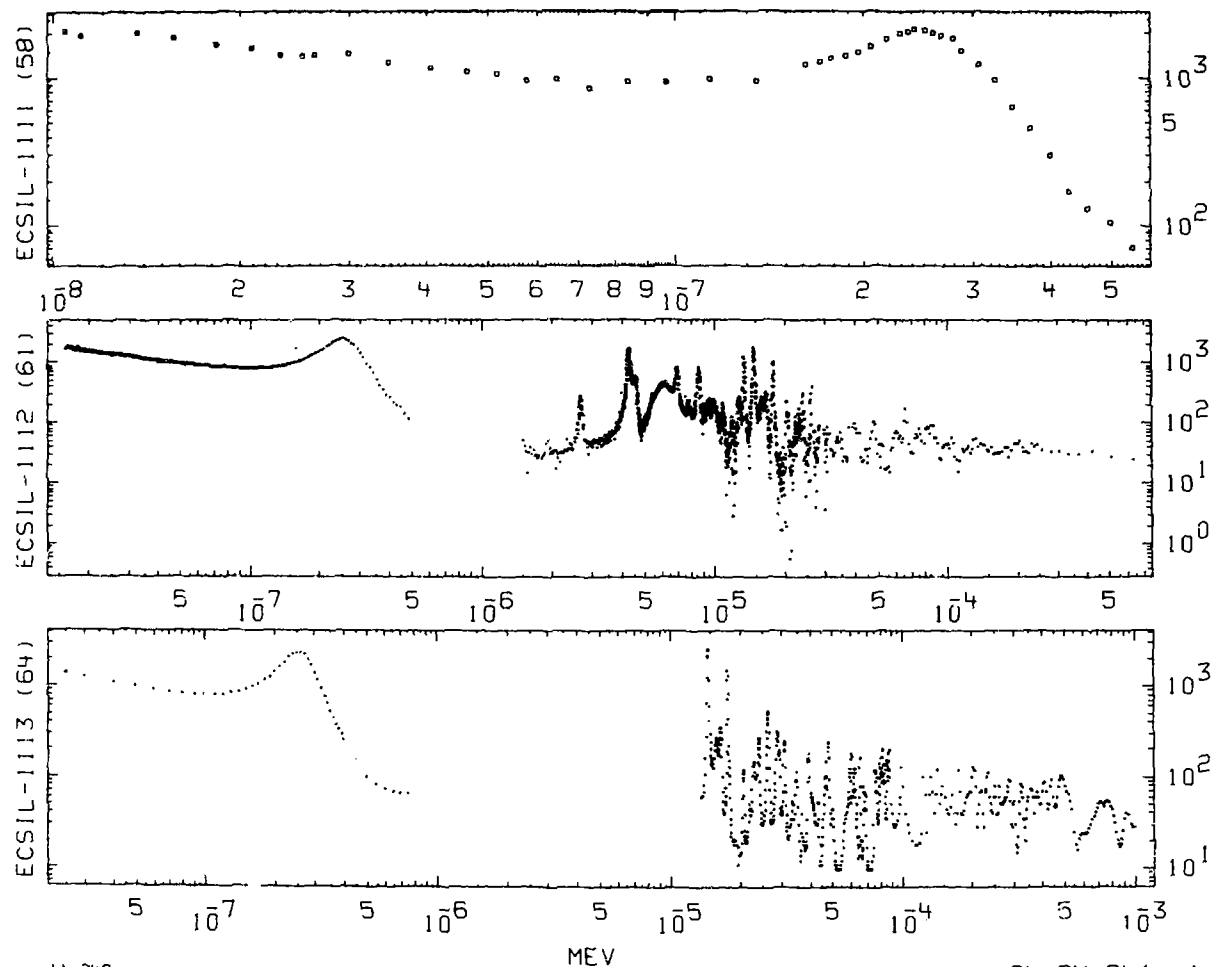
94-PU-240

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
66 1070	1.0000- 1		2.8900+ 0 1.9000- 1	
66 1070	1.0000+ 0		2.5500+ 0 3.5000- 1	
66 1070	1.6000+ 0		3.2600+ 0 1.2000- 1	
61 1078	3.6000+ 0		3.2500+ 0 1.5000- 1	
61 1078	1.5000+ 1		4.4000+ 0 2.0000- 2	

03/01/74

TOTAL
CROSS SECTION

94-PU-241



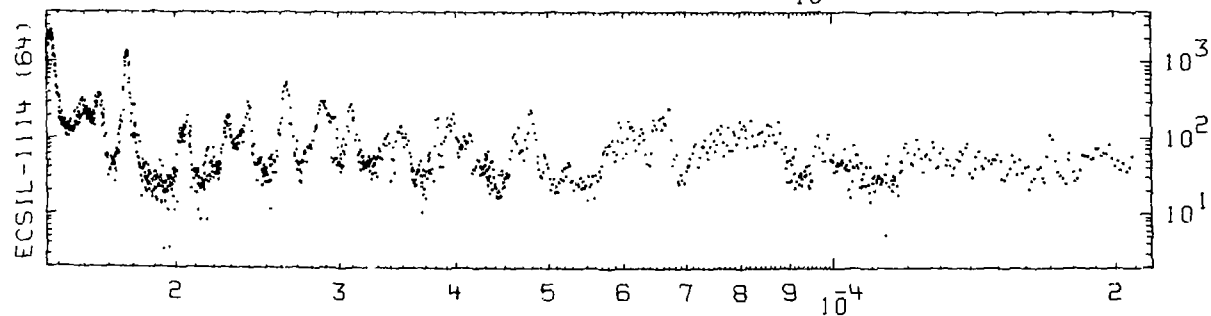
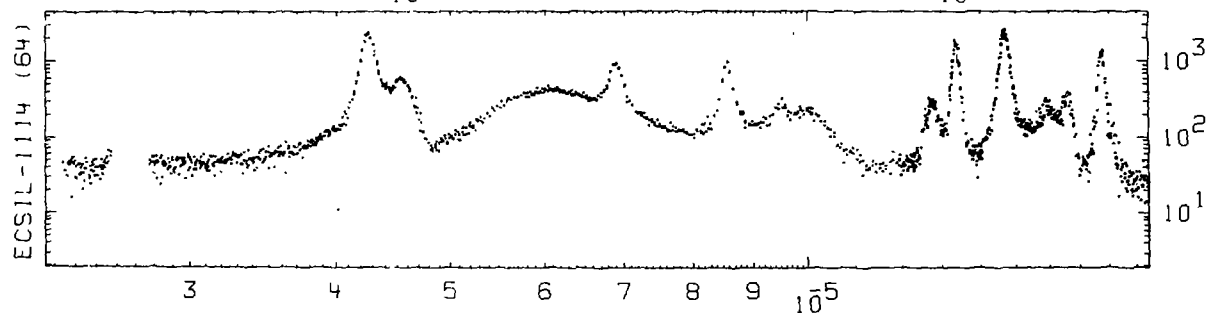
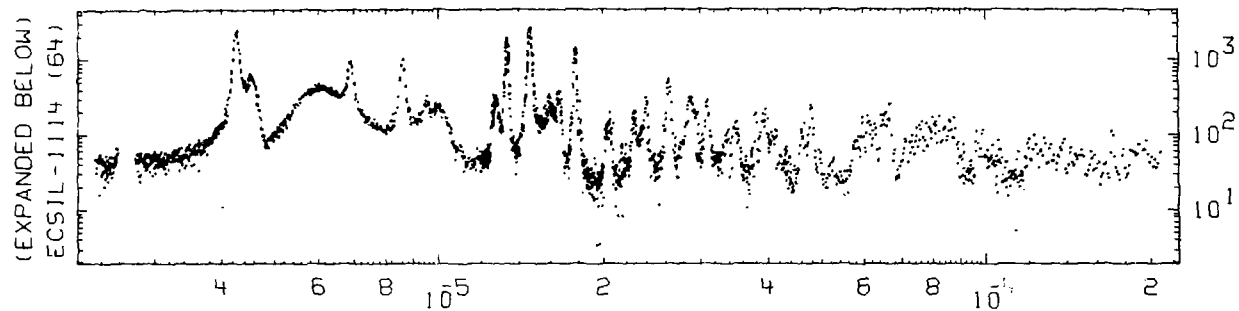
11-246

94-PU-241 -1

03/01/74

TOTAL
CROSS SECTION

94-PU-241



BARNs

11-247

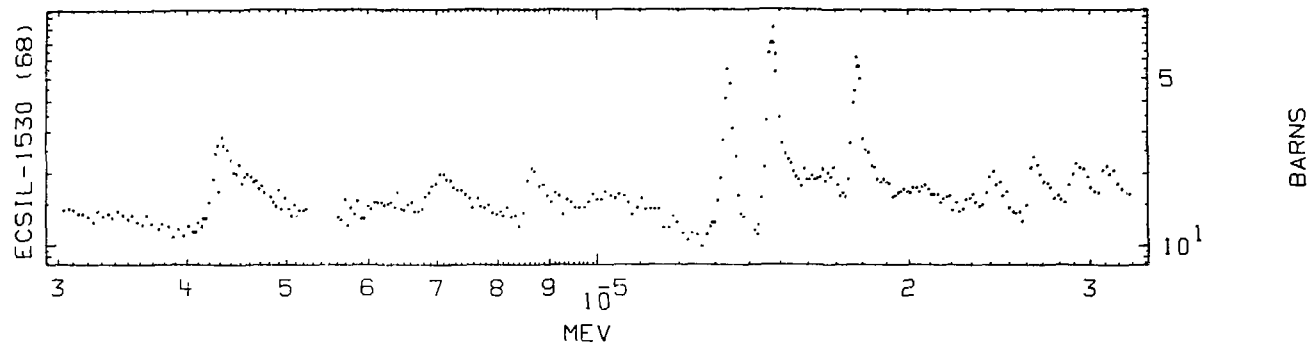
MEV

94-PU-241 -2

03/01/74

ELASTIC
CROSS SECTION

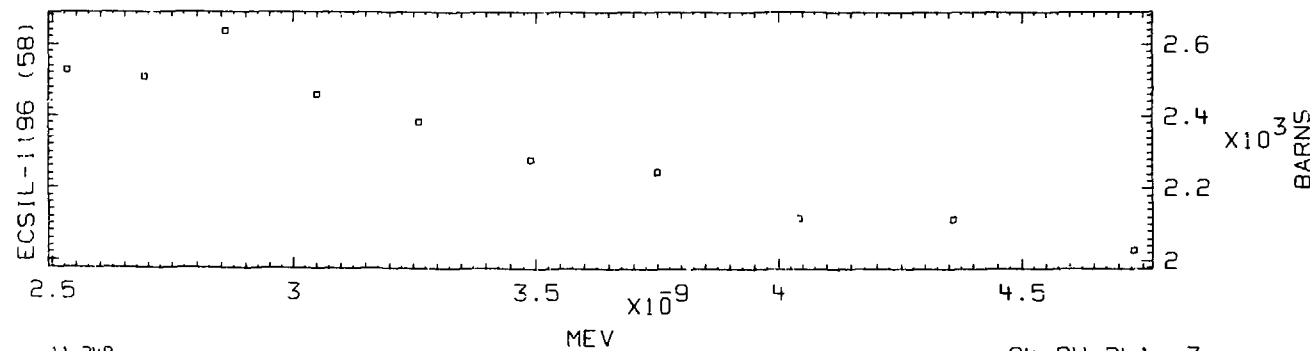
94-PU-241



03/01/74

FISSION
CROSS SECTION

94-PU-241



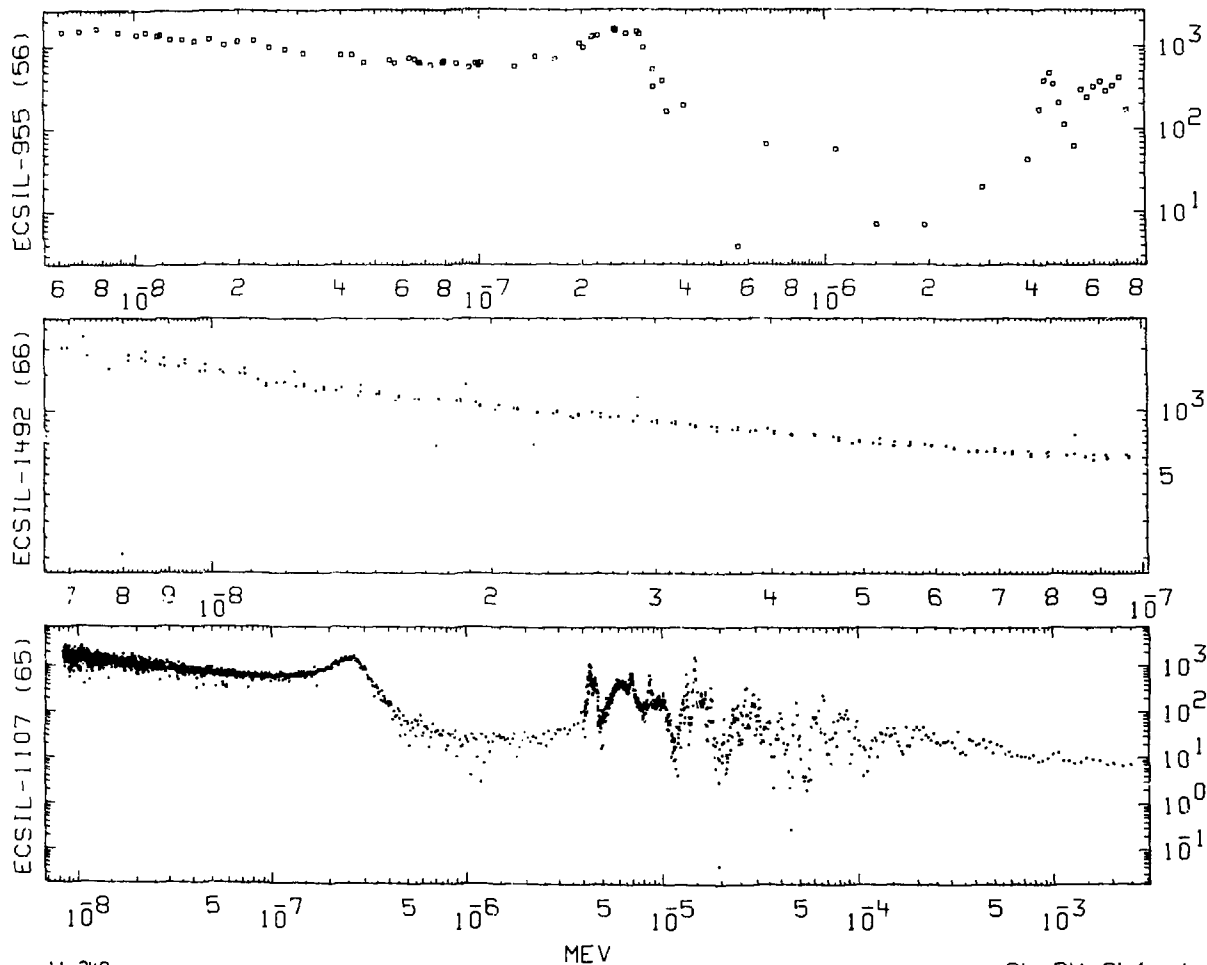
11-248

94-PU-241 -3

03/01/74

FISSION
CROSS SECTION

94-PU-241



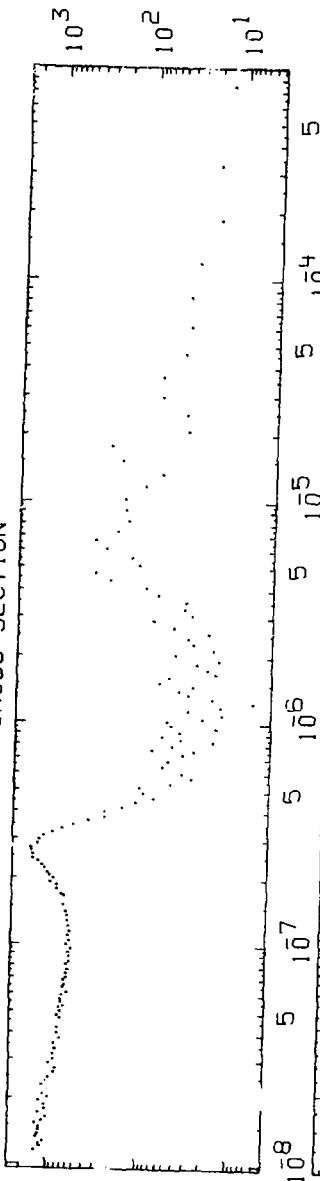
BARNs

03/01/74

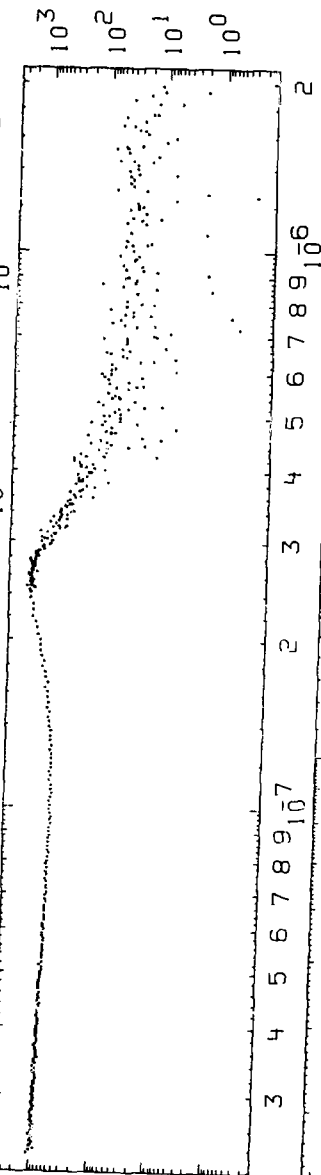
FISSION CROSS SECTION

94-PU-241

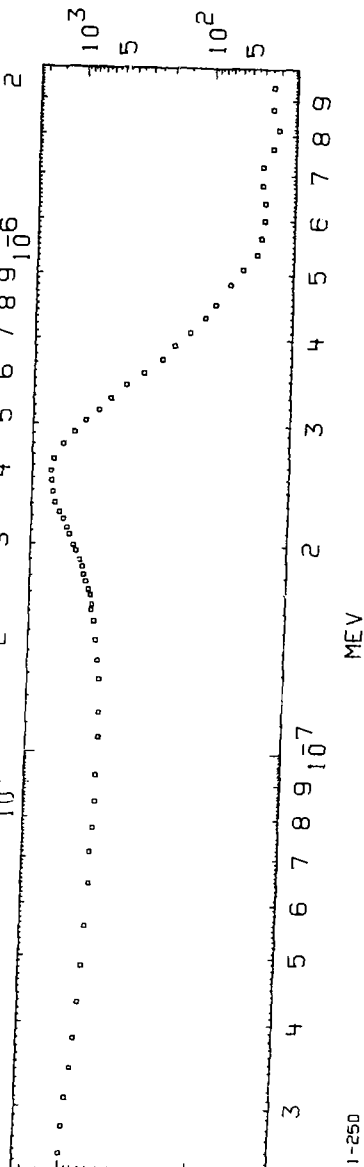
EC5IL-956 (55)



EC5IL-1109 (64)



EC5IL-1108 (58)



11-250

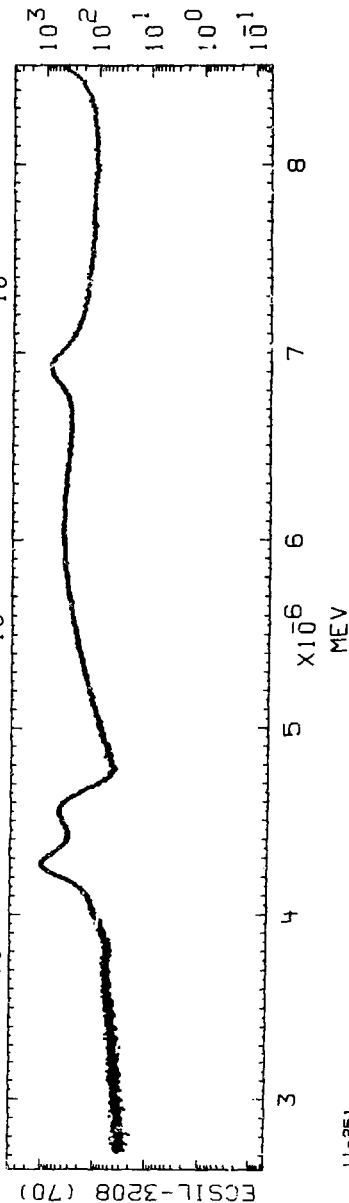
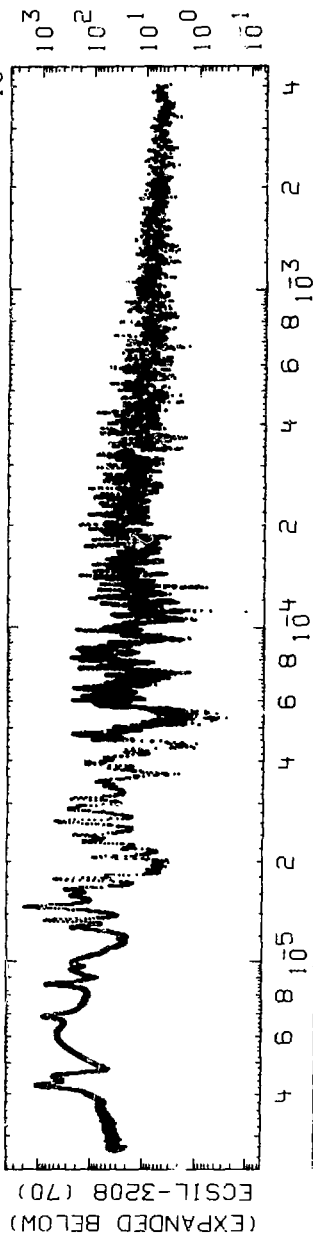
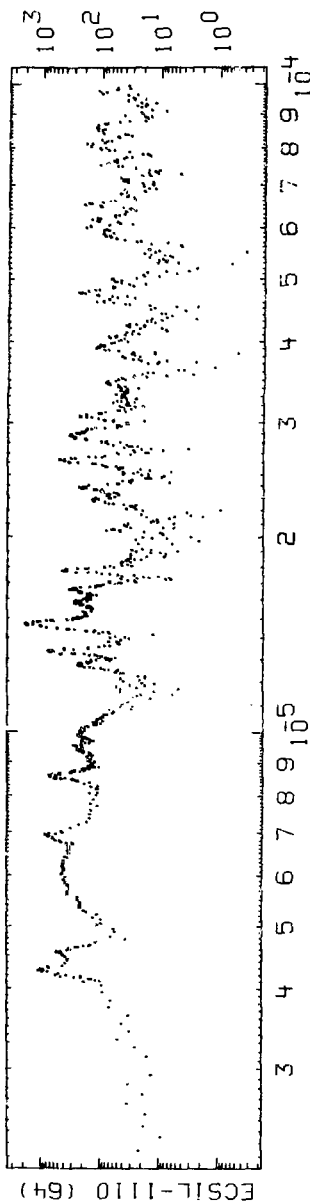
94-PU-241 -5

BARNs

03/01/74

FISSION CROSS SECTION

94-PU-241



11-251

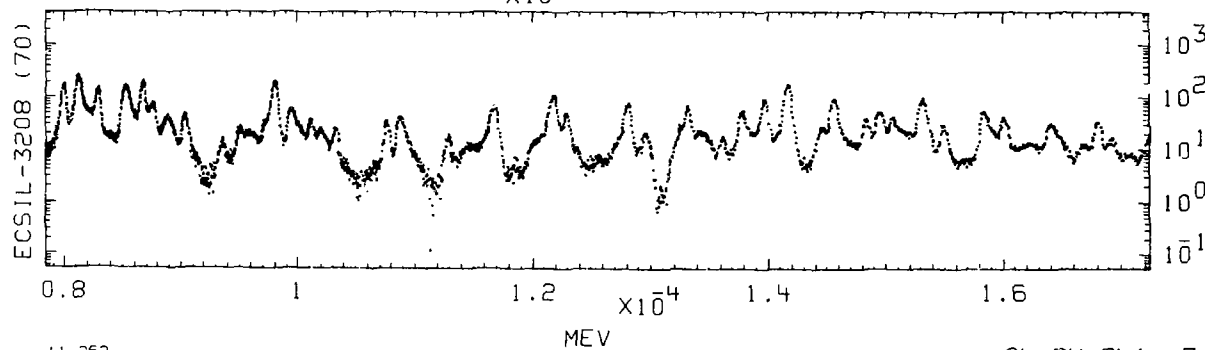
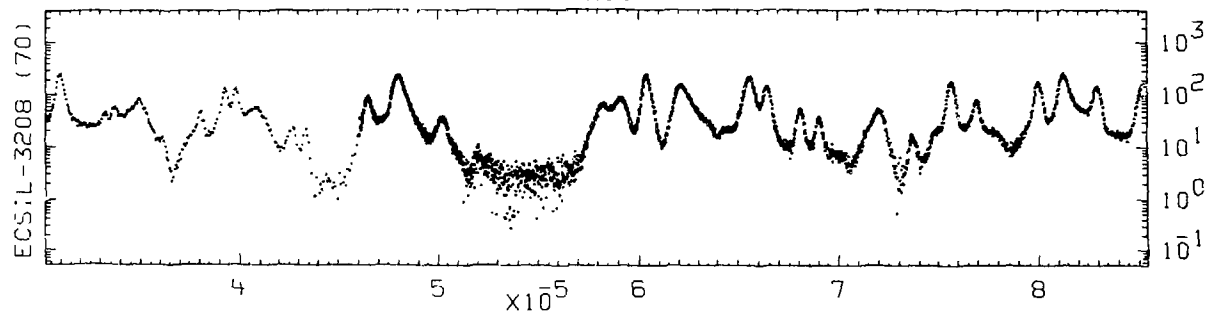
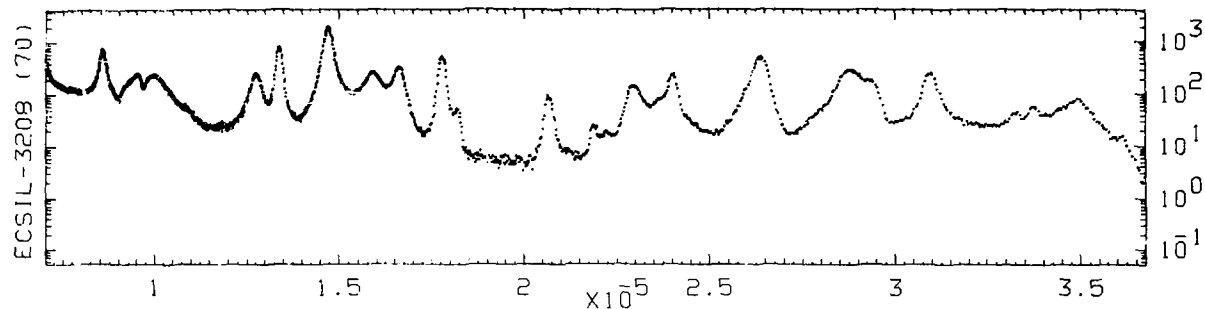
94-PU-241 -6

BARNs

03/01/74

FISSION
CROSS SECTION

94-PU-241



11-252

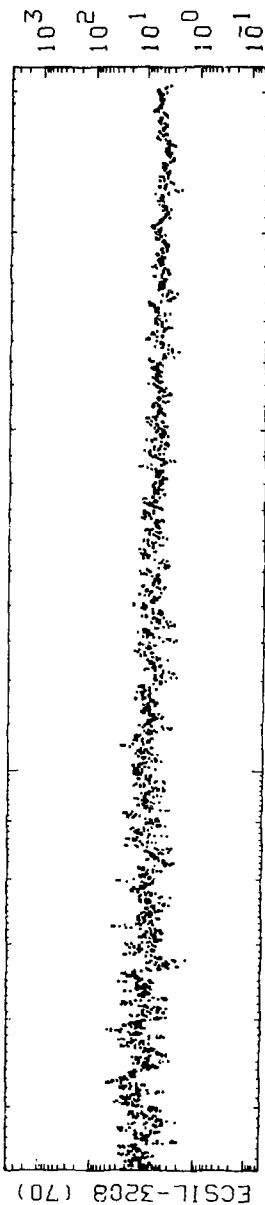
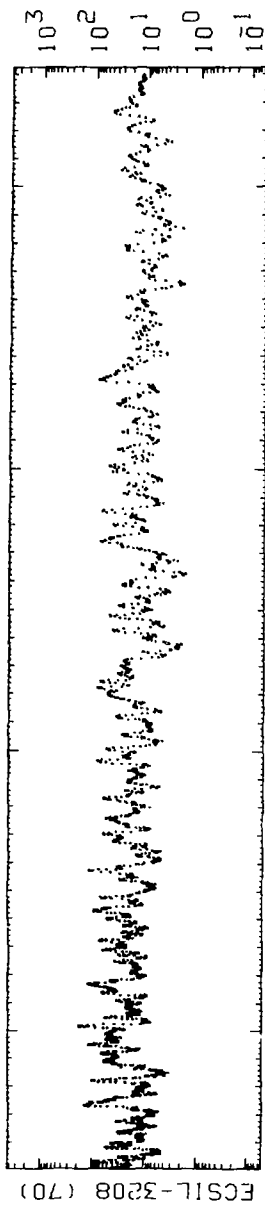
94-PU-241 -7

BARNs

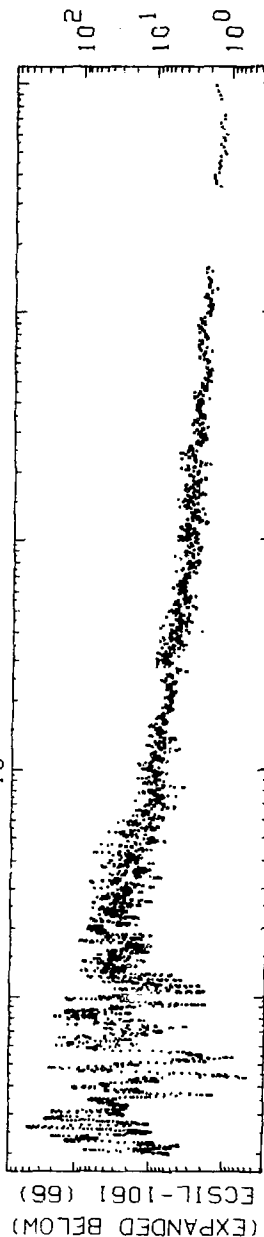
03/01/74

FISSION
CROSS SECTION

94-PU-241



BARNs



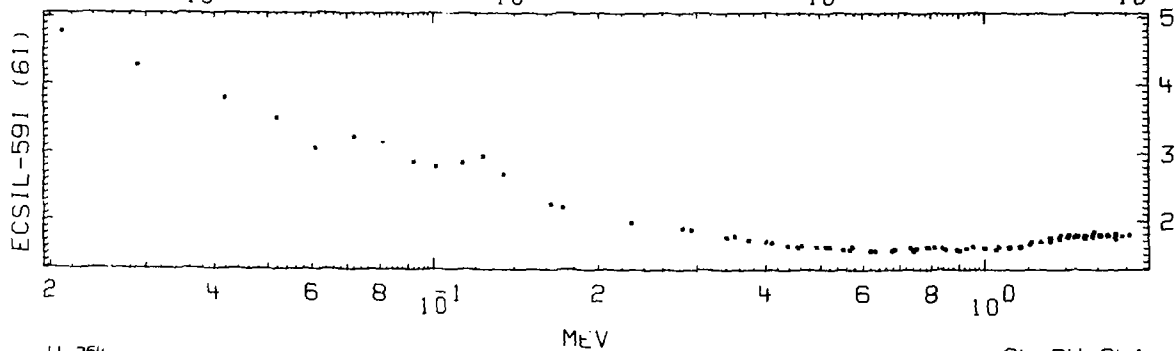
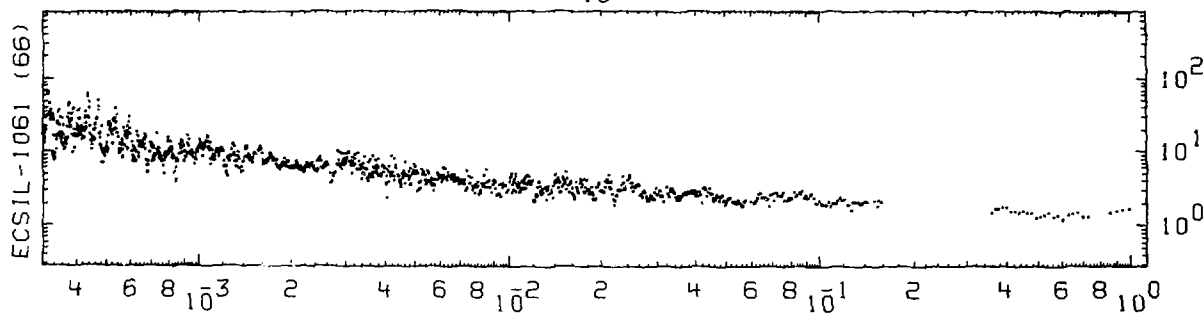
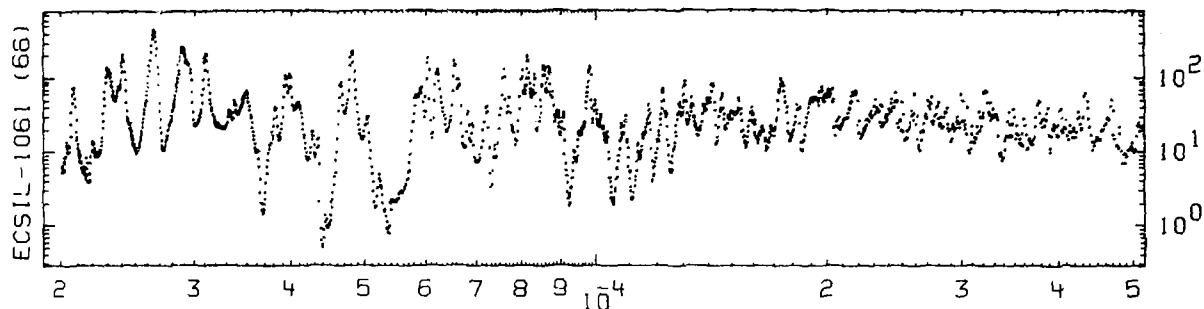
11-253

94-PU-241 -8

03/01/74

FISSION
CROSS SECTION

94-PU-241

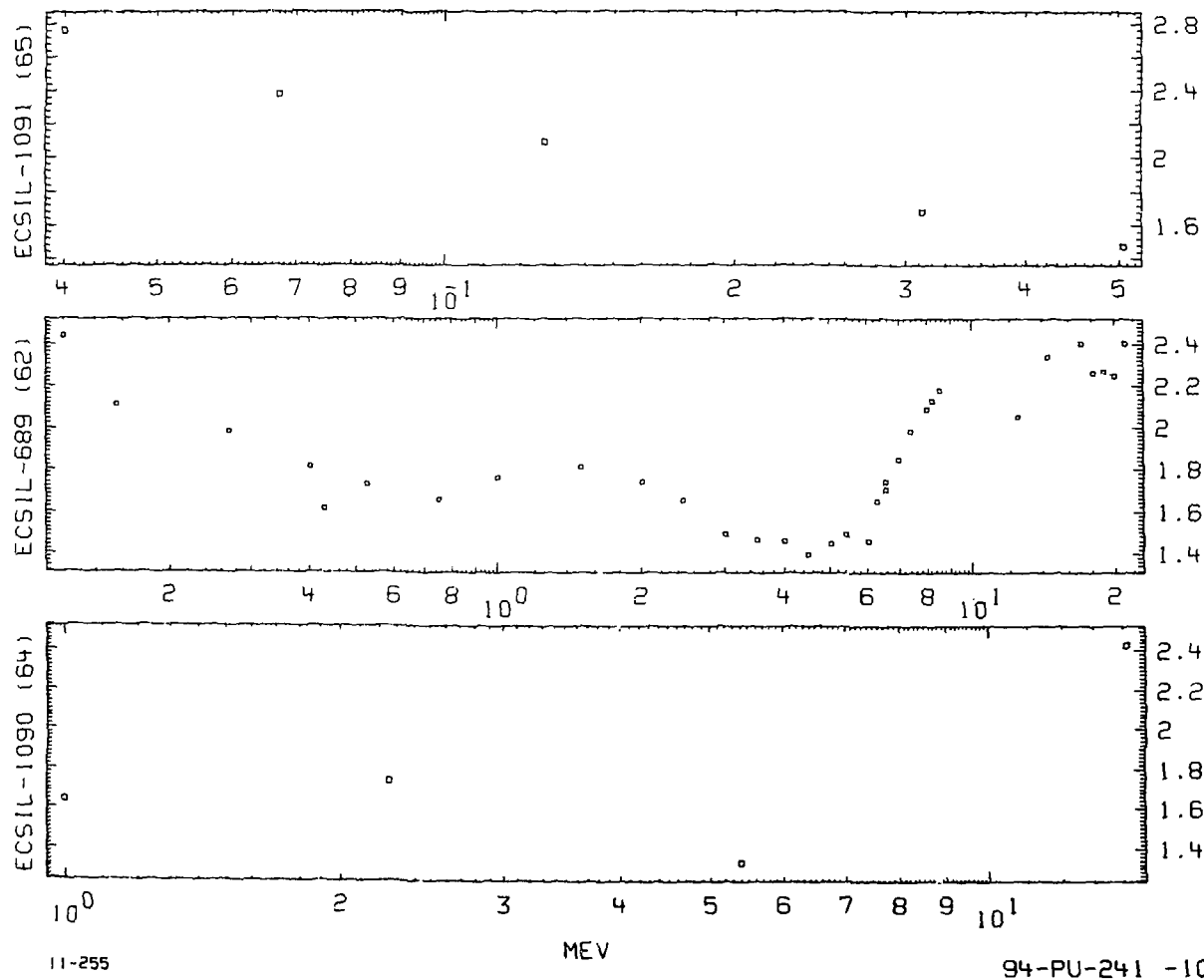


BARNs

03/01/74

FISSION
CROSS SECTION

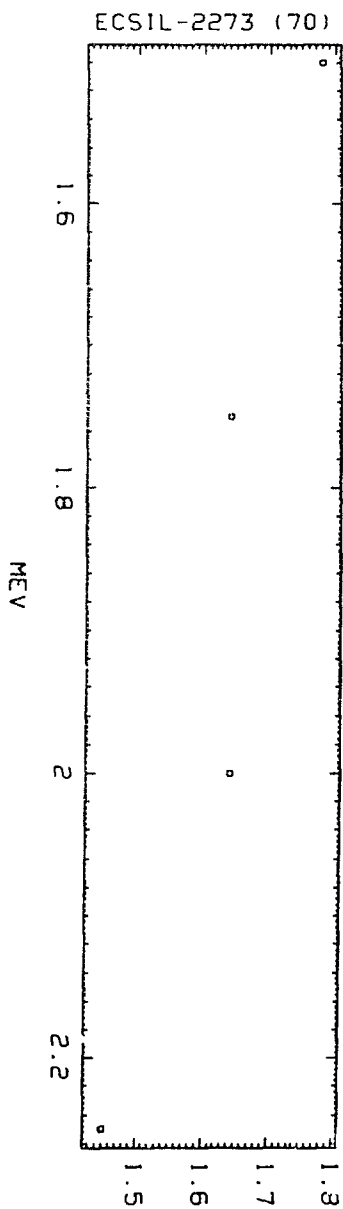
94-PU-241



03/01/74

FISSION
CROSS SECTION

94-PU-241

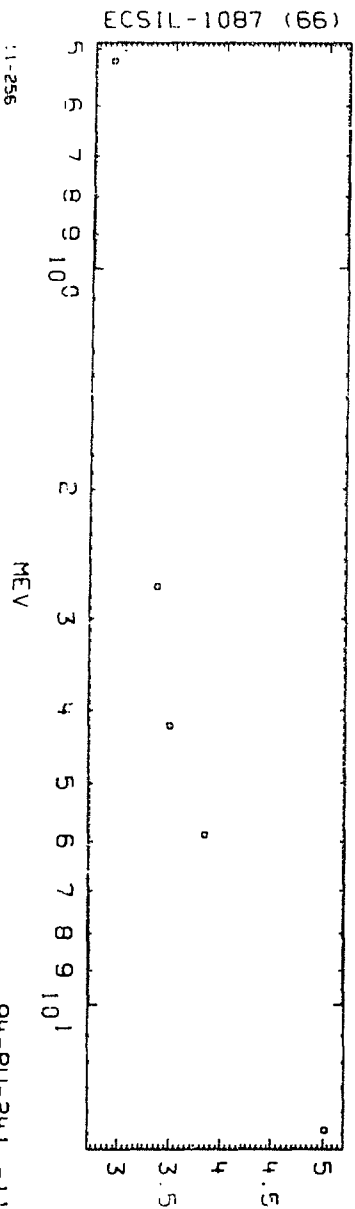


ECSIL-2273 (70)

03/01/74

NEUTRONS/FISSION
PROMPT

94-PU-241



ECSIL-1087 (66)

NEUTRONS/FISSION

11-256

94-PU-241 -11

03/01/74

FISSION
CROSS SECTION

94-PU-241

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
55 1205	2.5300- 8		9.8740* 2	2.9700* 1	58 1164	2.5300- 8		1.0130* 3	8.0000* 0
66 1356	2.5300- 8		9.9790* 2	2.7820* 1	55 1182	2.5300- 8		1.1000* 3	3.0000* 1
66 1356	2.5300- 8		1.0330* 3	2.7820* 1	57 1181	1.0000- 7		5.4100* 2	2.0000* 1
66 1356	2.5300- 8	1.7710-10	1.0260* 3	2.7820* 1	68 2095	2.0000- 3	4.0000- 4	8.7000* 0	
57 1391	2.5300- 8		9.5040* 2	3.8020* 1	65 1072	2.4000- 2		2.8300* 0	2.1000- 1
57 1181	2.5300- 8		9.0500* 2		60 635	2.5000* 0		1.2000* 0	2.0000- 1
59 1180	2.5300- 8		9.5600* 2	4.3000* 1	60 635	1.4600* 1		2.0500* 0	1.0000- 1

03/01/74

N, GAMMA

94-PU-241

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
66 1131	2.5300- 8		3.5900* 2	1.6000* 1

03/01/74

PROMPT NEUTRONS/FISSION

94-PU-241

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA	REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
69 1912	2.5300- 8		2.8740* 0	1.5000- 2	59 1067	2.5300- 8		2.9600* 0	8.0000- 2
55 1097	2.5300- 8		3.1000* 0	1.2400- 1	59 1092	2.5300- 8		3.1260* 0	4.8280- 2
55 1098	2.5300- 8		2.9800* 0	2.8650- 2	61 1153	2.5300- 8		2.8800* 0	1.8000- 1
55 1099	2.5300- 8		2.9800* 0	2.1000- 1	65 1085	2.5300- 8		2.9210* 0	2.6550- 2
55 1187	2.5300- 8		2.9100* 0	1.0000- 1	67 1417	2.5300- 8		2.9470* 0	8.0000- 3
56 1065	2.5300- 8		3.0200* 0	2.1000- 1	58 1172	2.5300- 8		3.1500* 0	9.7650- 2

03/01/74

DELAYED NEUTRONS/FISSION

94-PU-241

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
61 1334	2.5000- 8		1.5400- 2	1.5000- 3

03/01/74

NEUTRONS/NONELASTIC
EVENT

94-PU-241

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
67 1523	2.5300- 8		2.1700+ 0	1.7000- 2
68 1524	6.0000- 8		2.2000+ 0	2.0000- 2
68 1524	2.5300- 6		2.1700+ 0	2.0000- 2

03/01/74

CAPTURE/FISSION RATIO

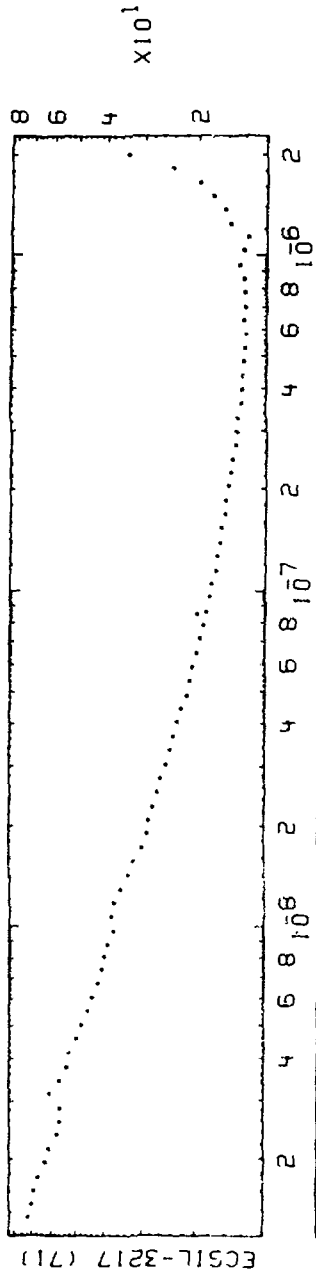
94-PU-241

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
67 1523	2.5300- 8		3.6810- 1	1.0500- 2
68 1524	2.5300- 8		1.3700+ 0	1.0000- 2
66 1131	2.5300- 8		3.5600- 1	1.7000- 2
66 1312	2.5300- 8		3.5500- 1	1.5000- 2
68 1524	6.0000- 8		1.3500+ 0	1.0000- 2

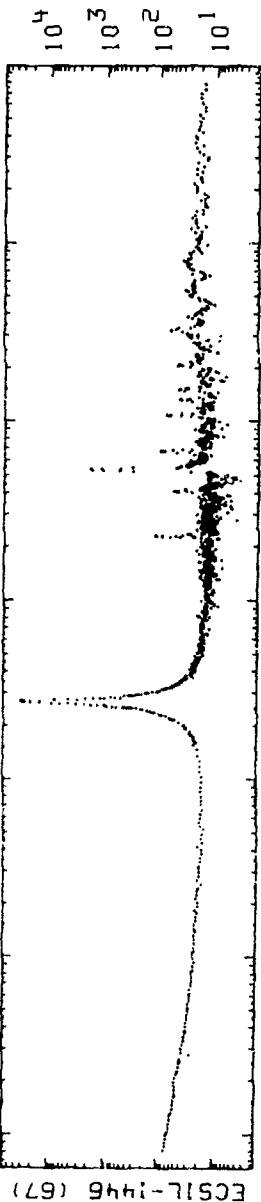
03/01/74

94-PU-242

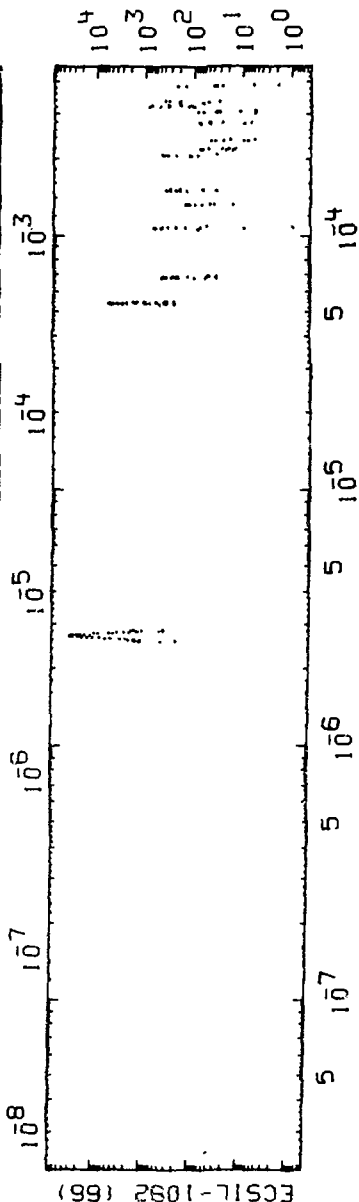
TOTAL CROSS SECTION



ECSIL-3217 (71)



ECSIL-1446 (67)



ECSIL-1092 (66)

MEV

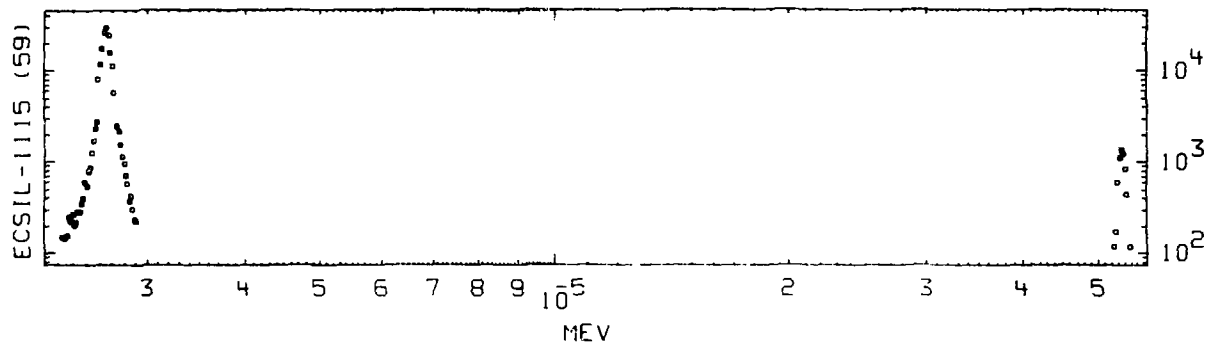
11-259

94-PU-242 -1

03/01/74

TOTAL
CROSS SECTION

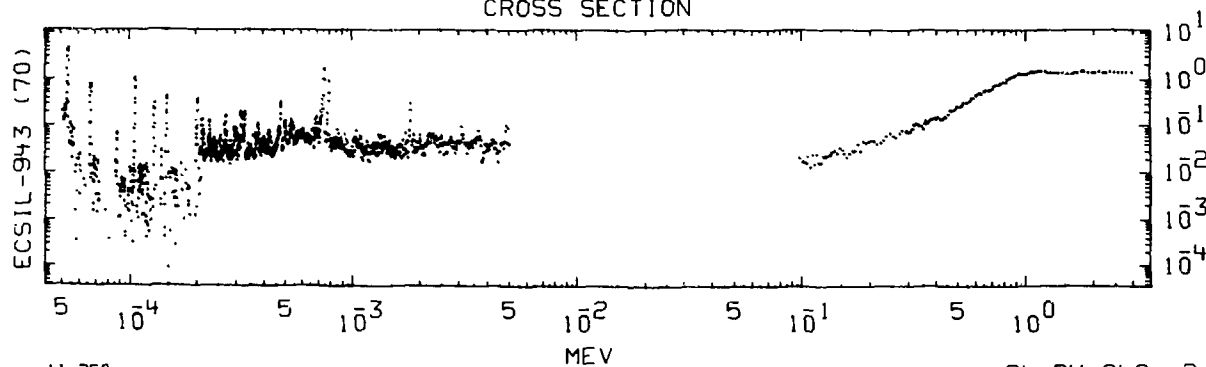
94-PU-242



03/01/74

FISSION
CROSS SECTION

94-PU-242



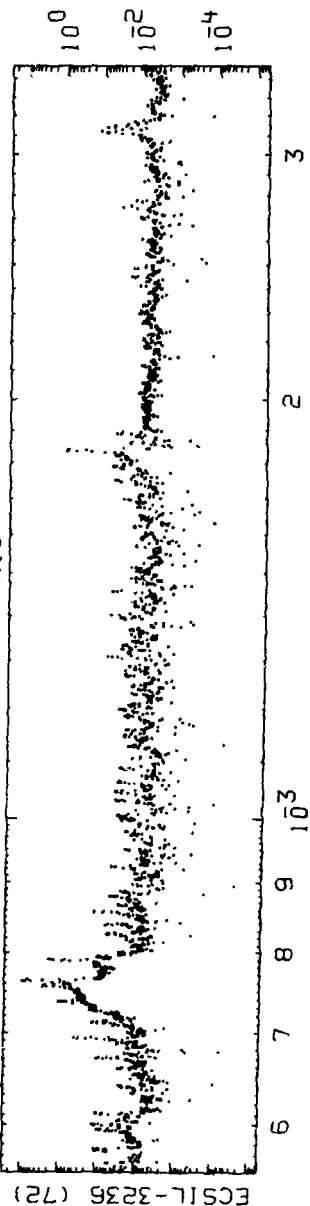
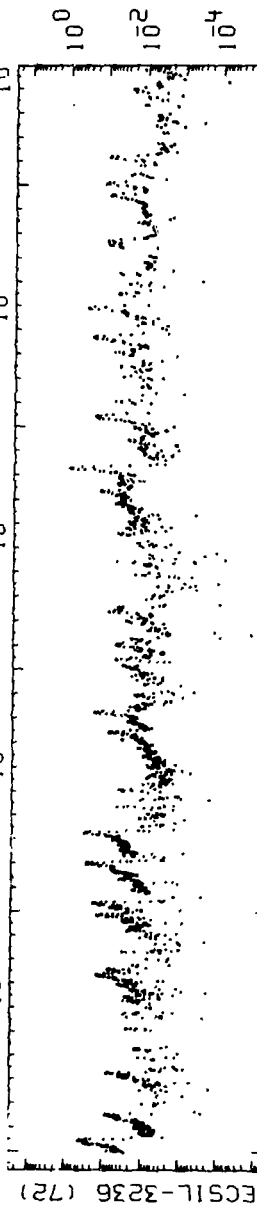
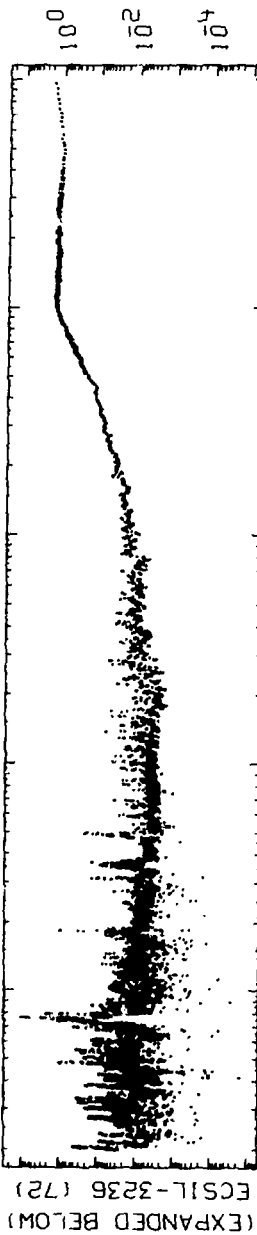
11-250

94-PU-242 -2

03/01/74

94-PU-242

FISSION CROSS SECTION



11-261

MEV

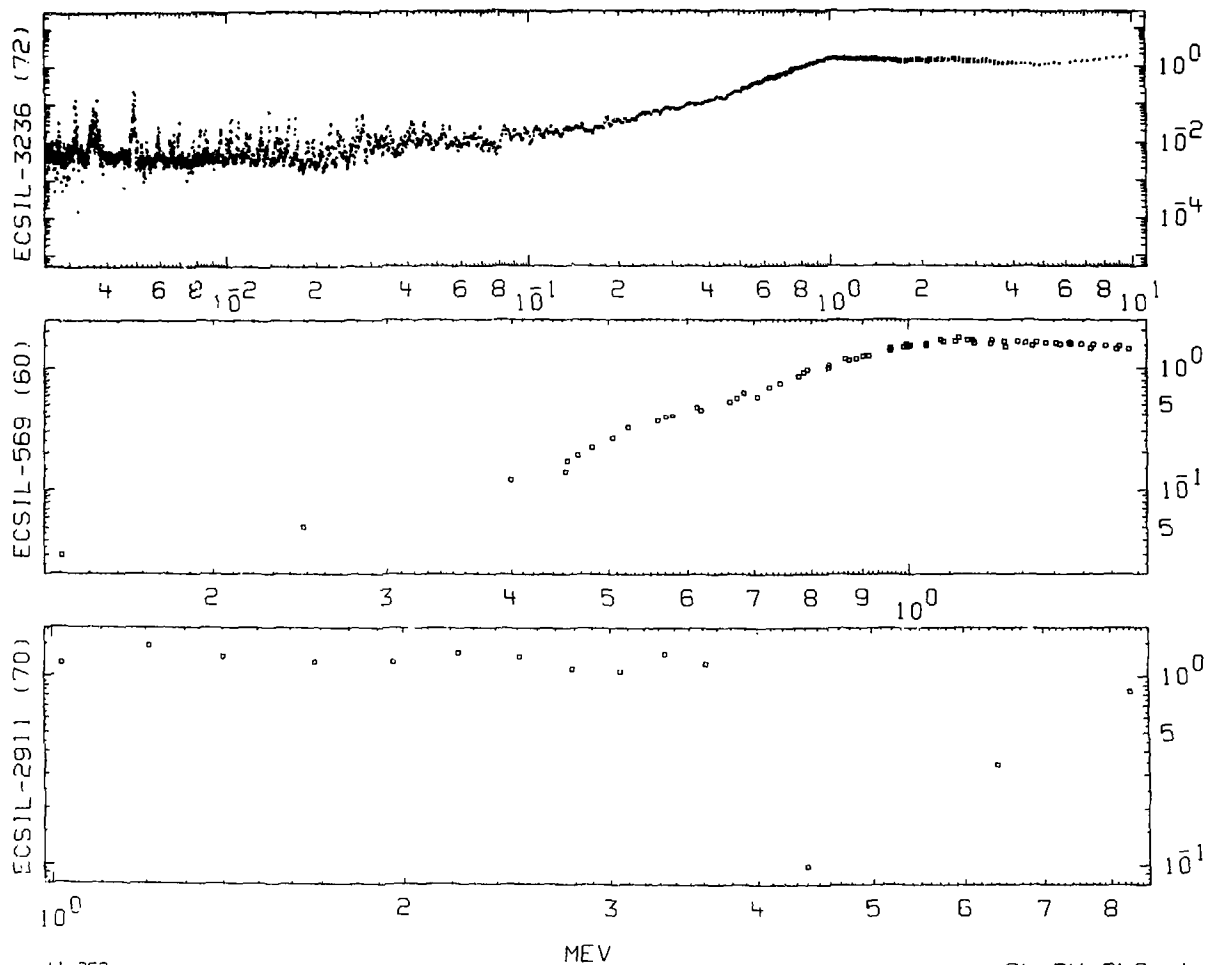
94-PU-242 -3

BARNs

03/01/74

FISSION
CROSS SECTION

94-PU-242



11-262

MEV

94-PU-242 -4

03/01/74

FISSION
CROSS SECTION

94-PU-242

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
67 1518	1.4500+ 1		2.0600+ 0	1.5000- 1

03/01/74

N, GAMMA

94-PU-242

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
57 1348	2.5000- 8		1.8600+ 1	8.0000- 1

03/01/74

FISSION
CROSS SECTION

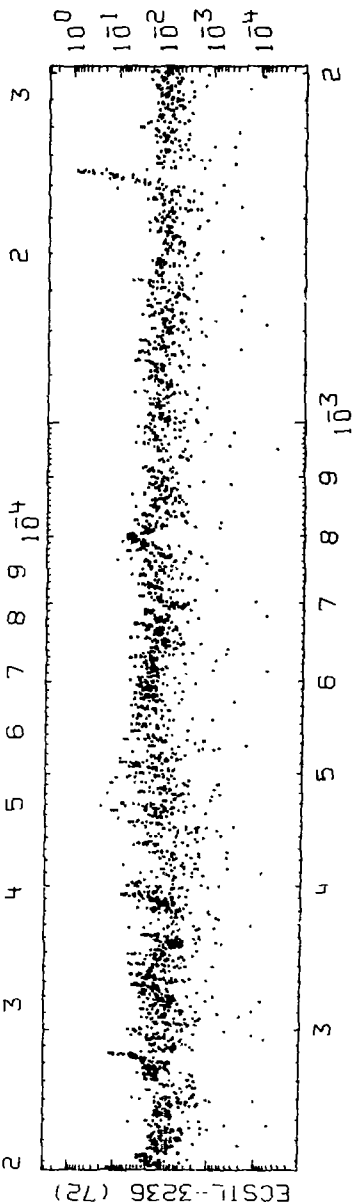
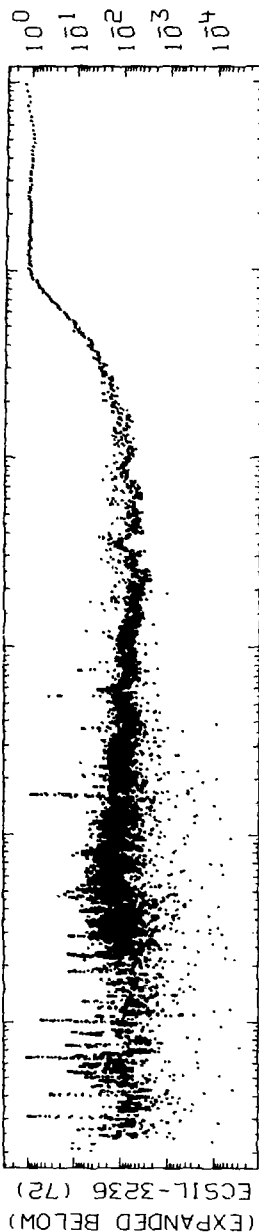
94-PU-243

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
70 2273	1.5600+ 0	1.2500- 1	1.4900+ 0	2.9800- 1
70 2273	1.7500+ 0	1.2500- 1	1.3800+ 0	2.7600- 1
70 2273	2.0000+ 0	1.2500- 1	1.3100+ 0	2.6200- 1

03/01/74

94-PU-244

FISSION CROSS SECTION



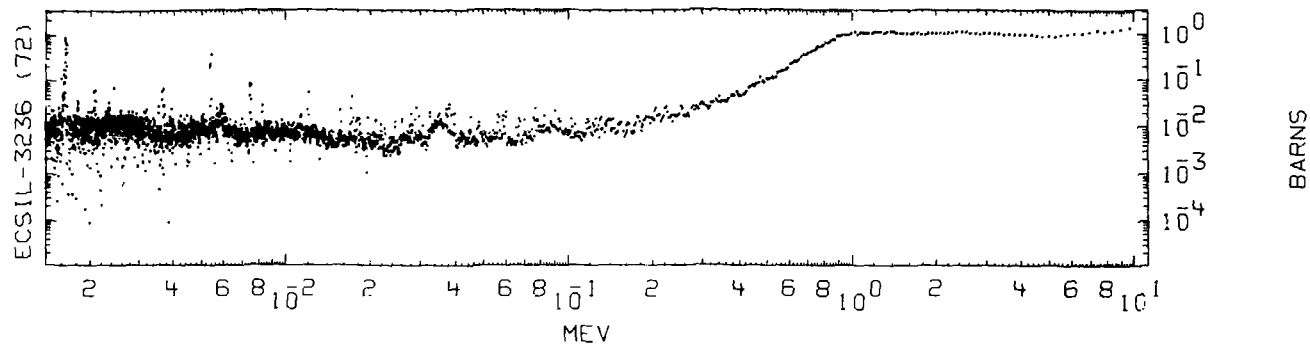
11-265

94-PU-244 -1

03/01/74

FISSION
CROSS SECTION

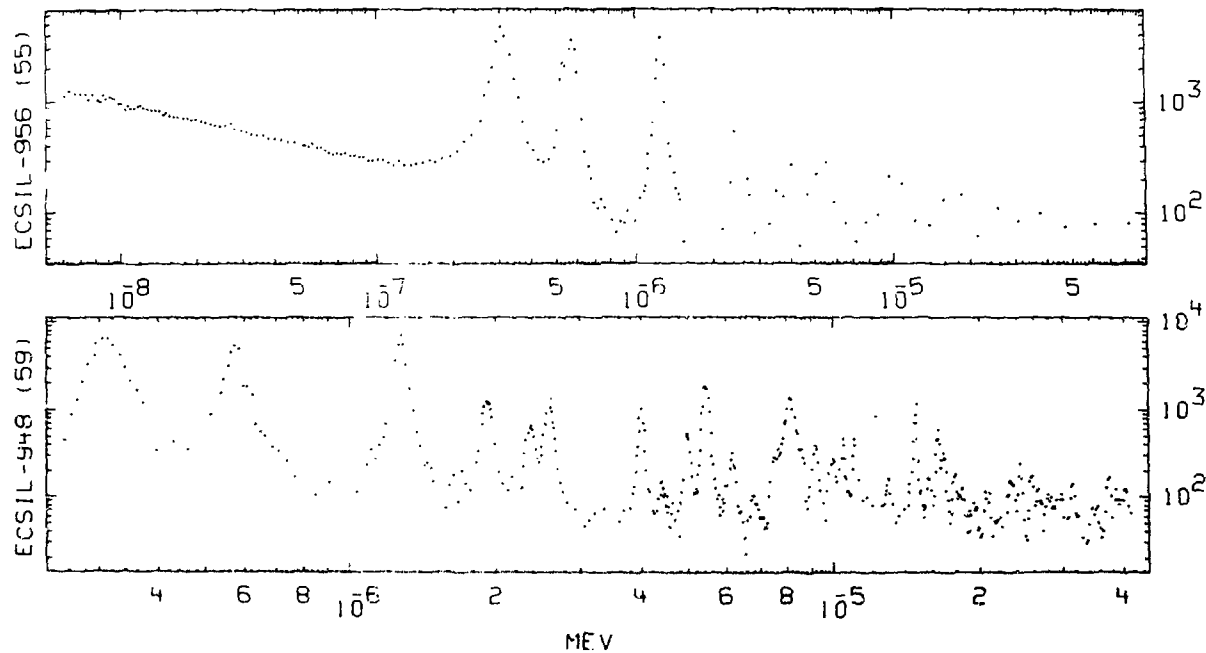
94-PU-244



03/01/74

TOTAL
CROSS SECTION

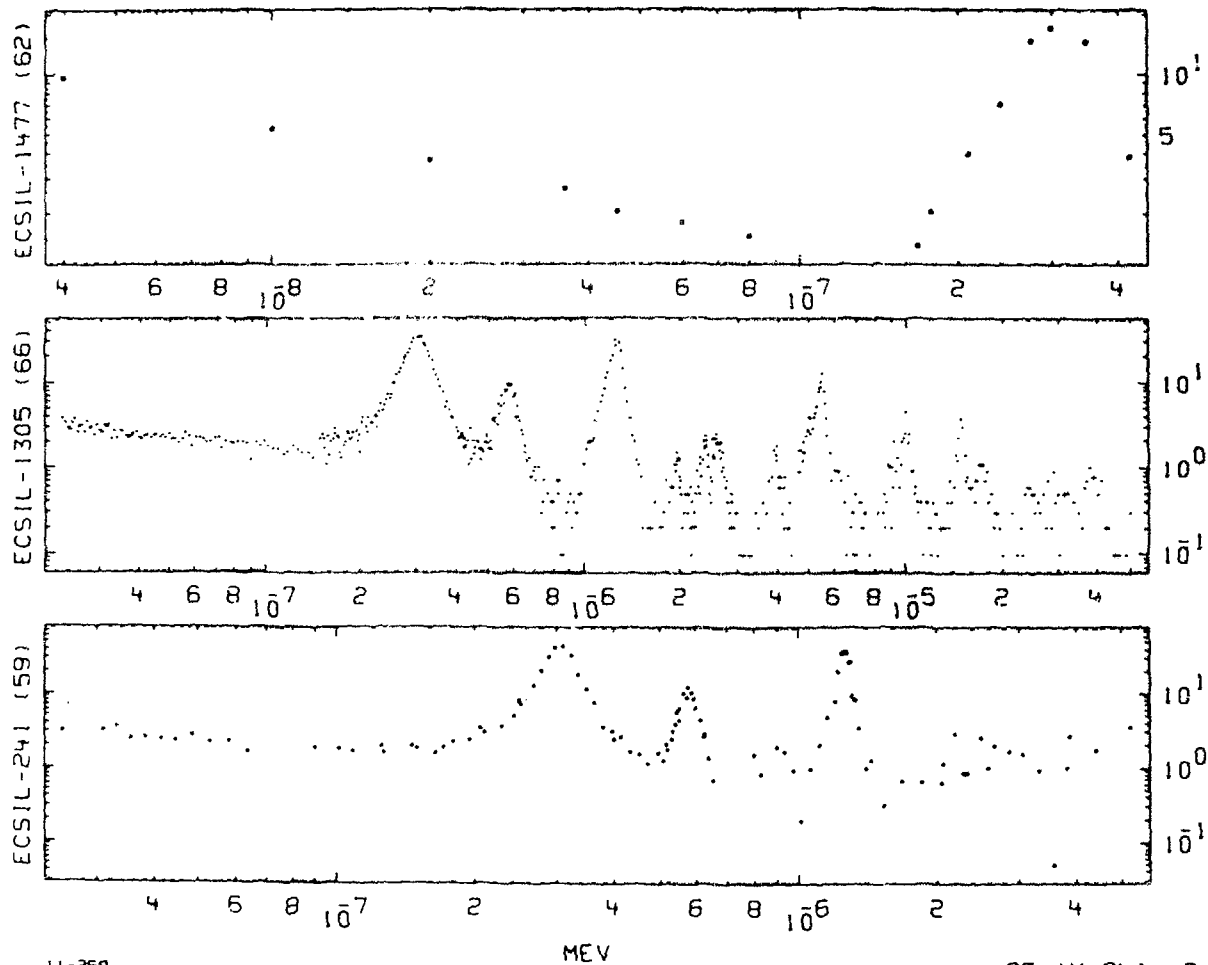
95-AM-241



03/01/74

FISSION
CROSS SECTION

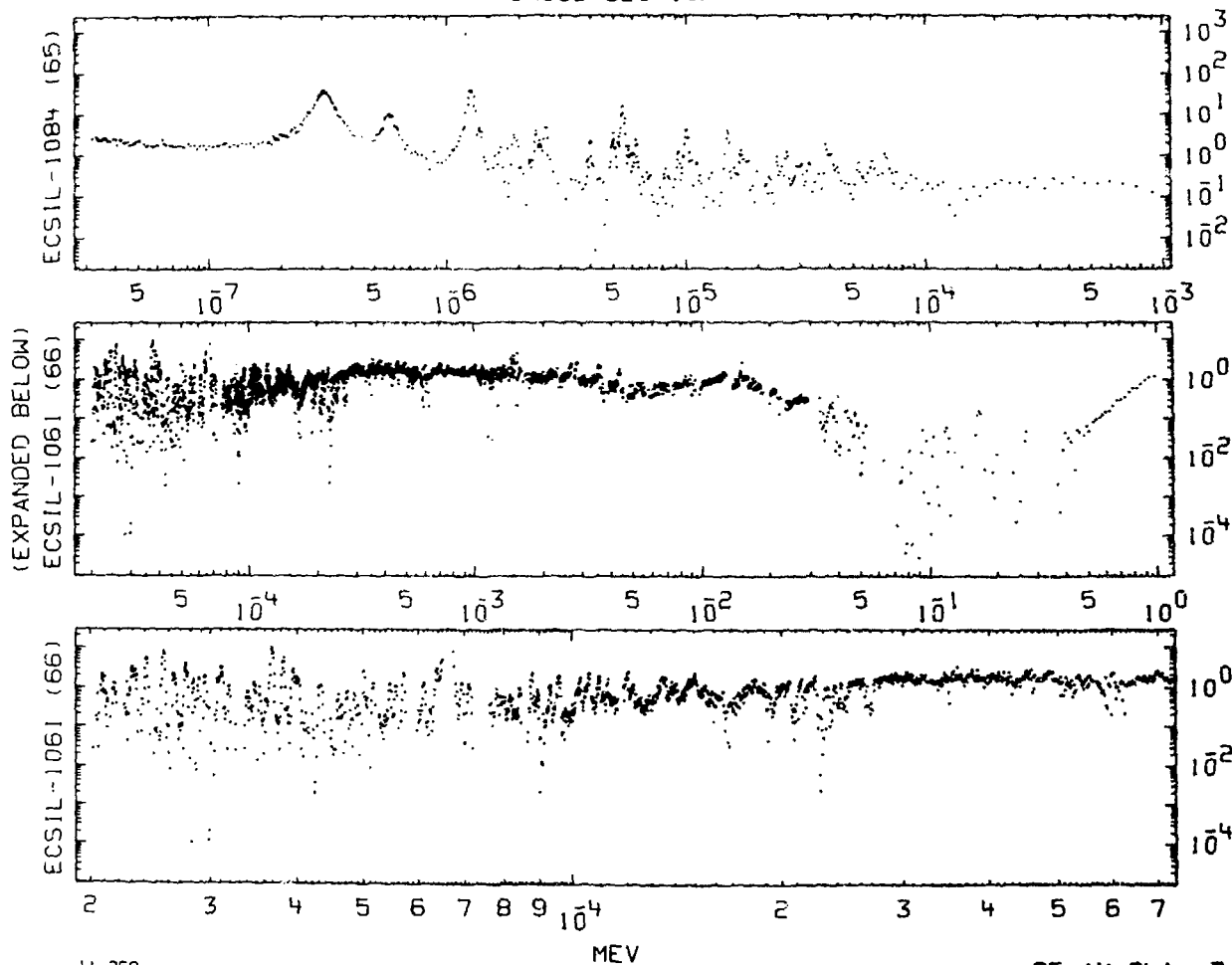
95-AM-241



03/01/74

FISSION
CROSS SECTION

95-AM-241



11-269

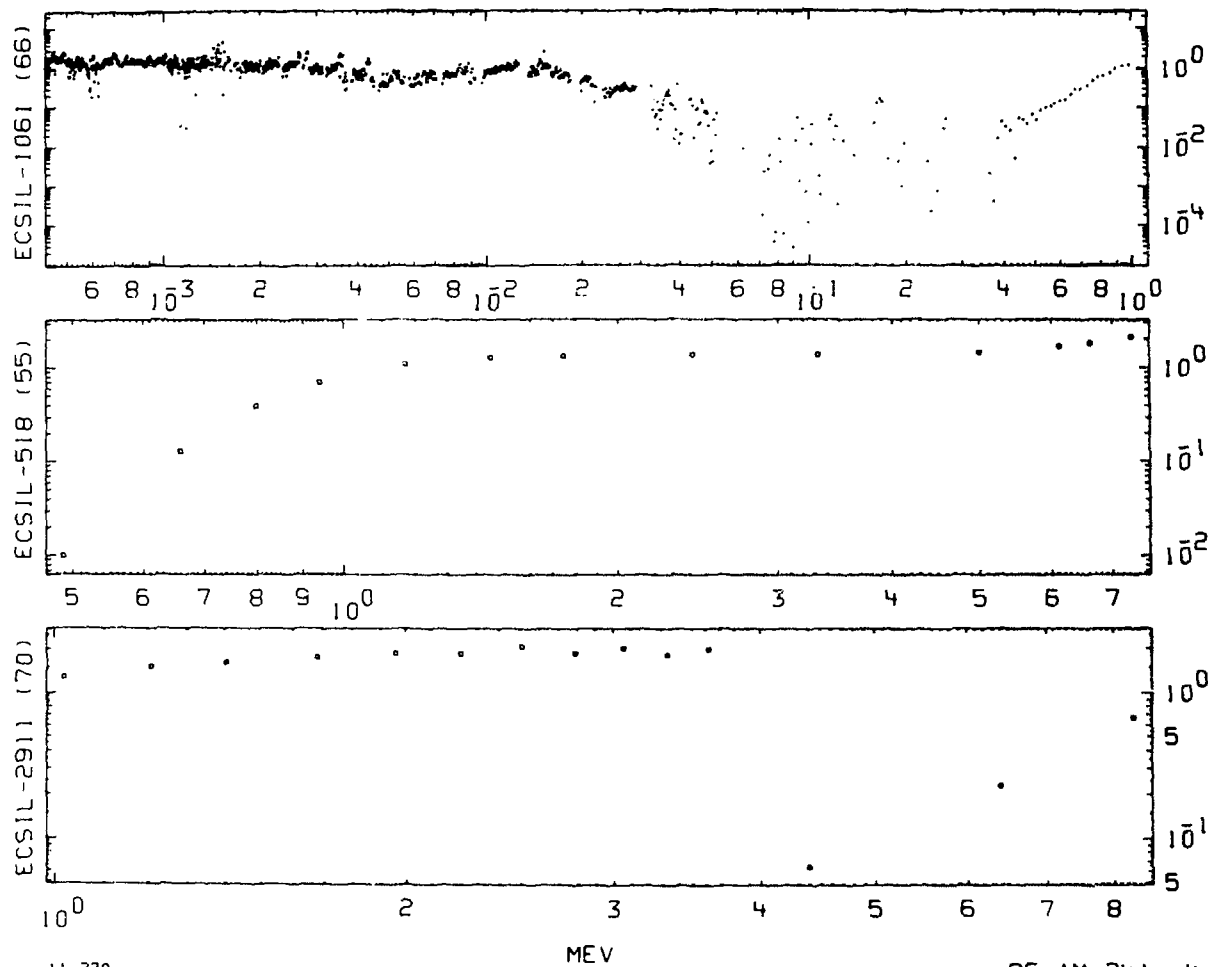
MEV

95-AM-241 -3

03/01/74

FISSION
CROSS SECTION

95-AM-241



11-270

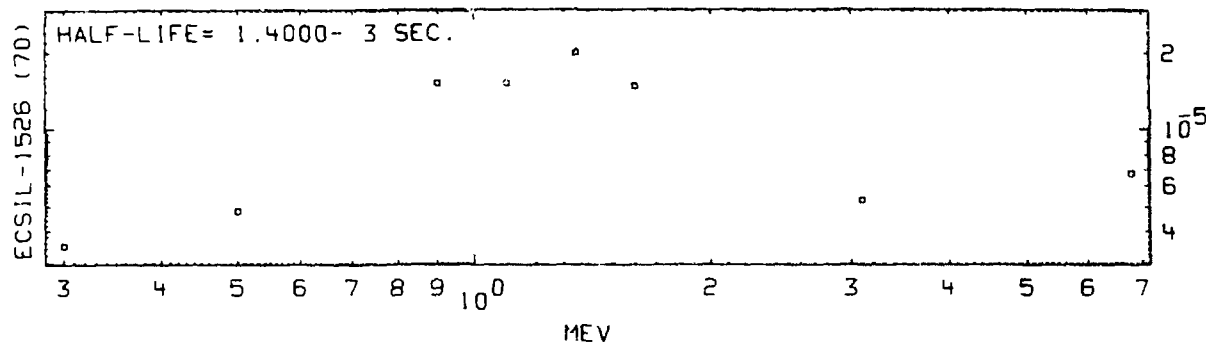
MEV

95-AM-241 -4

03/01/74

N, GAMMA
CROSS SECTION

95-AM-241



03/01/74

FISSION

95-AM-241

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
60 635	2.5000+ 0		1.9500+ 0	2.0000- 1
67 1518	1.4500+ 1		2.5300+ 0	1.2000- 1
67 1518	1.4500+ 1		2.3000+ 0	1.5000- 1
59 611	1.4600+ 1		2.3500+ 0	1.5000- 1
60 635	1.4600+ 1		2.9500+ 0	1.5000- 1

03/01/74

N, GAMMA

95-AM-241

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	HALF-LIFE YEARS
50 1476	2.5000- 8		1.0000+ 2	2.0000+ 2	1.5200+ 2

03/01/74

PROMPT NEUTRONS/FISSION

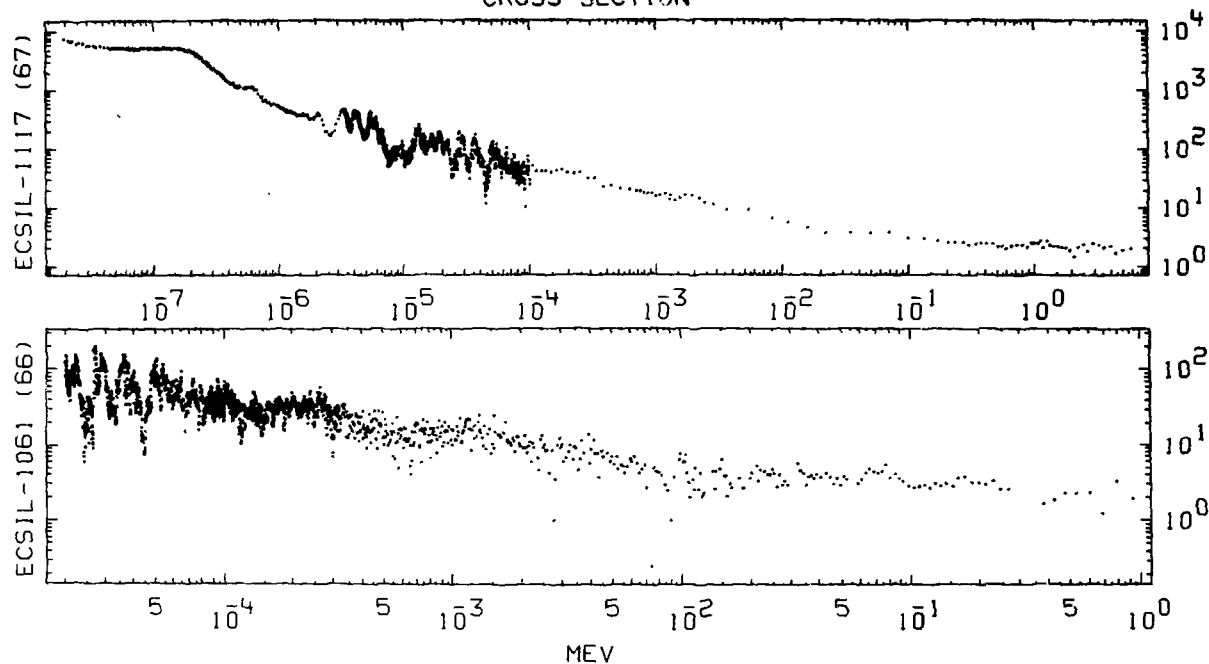
95-AM-241

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
69 1912	2.5300- 8		3.2190+ 0	3.8000- 2
58 1123	2.5300- 8		3.1400+ 0	5.0000- 2

03/01/74

FISSION
CROSS SECTION

95-AM-242



03/01/74

N, GAMMA

95-AM-242

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
50 1476	2.5000- 8		4.0000+ 3	

03/01/74

NEUTRONS/FISSION
PROMPT

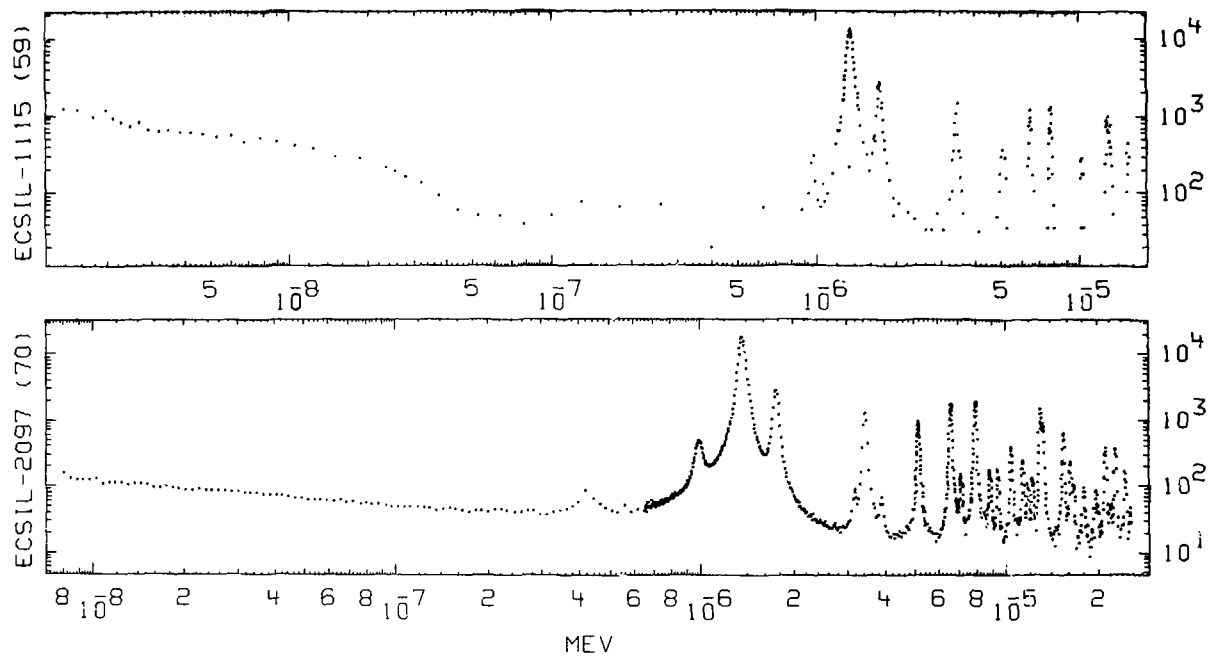
95-AM-242

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
69 1912	2.5300- 8		3.2640+ 0	2.4000- 2
66 1336	2.5300- 8		3.2400+ 0	1.2000- 1

03/01/74

TOTAL
CROSS SECTION

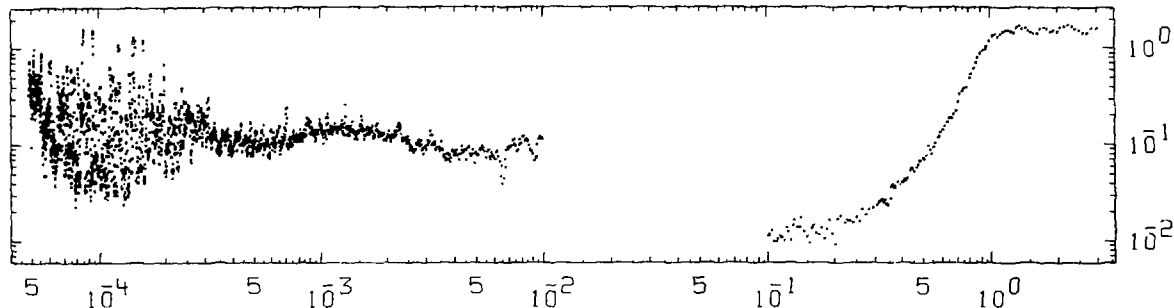
95-AM-243



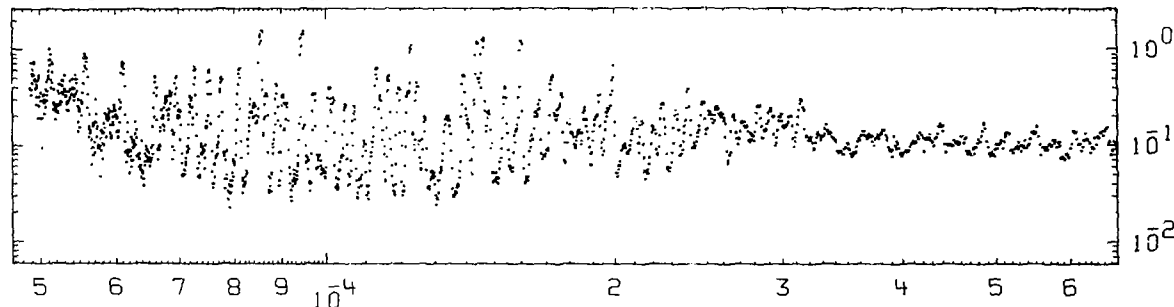
03/01/74

FISSION
CROSS SECTION

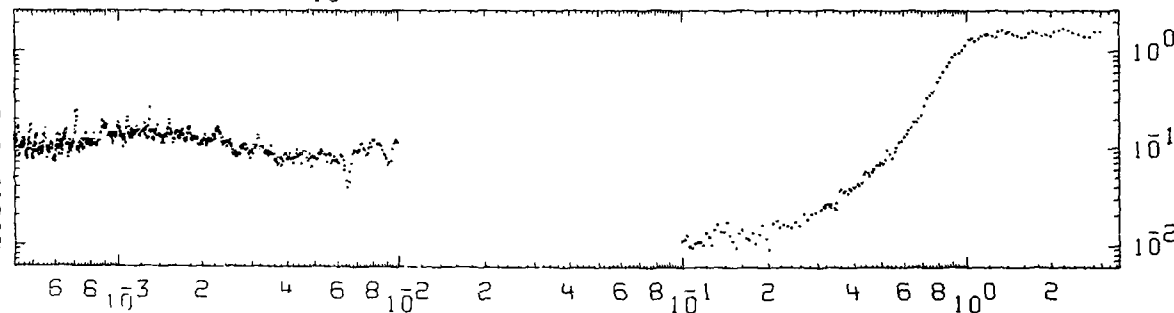
95-AM-243

(EXPANDED BELOW)
ECSIL-943 (70)

ECSIL-943 (70)



ECSIL-943 (70)



BARN

11-275

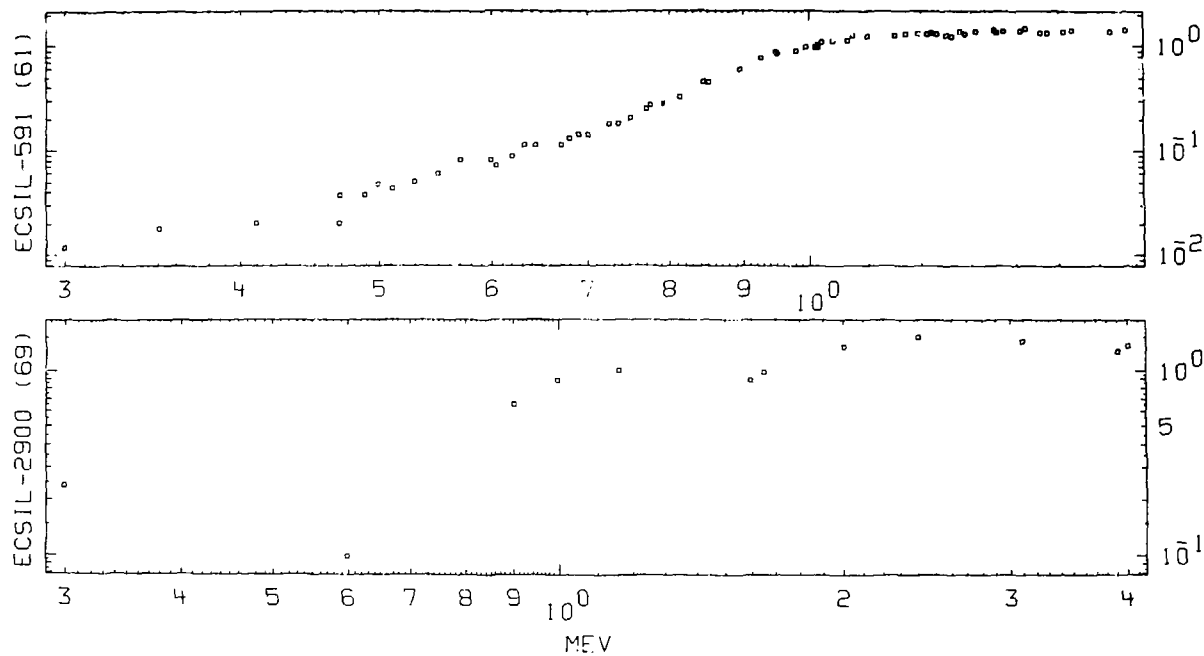
MEV

95-AM-243 -2

03/01/74

FISSION CROSS SECTION

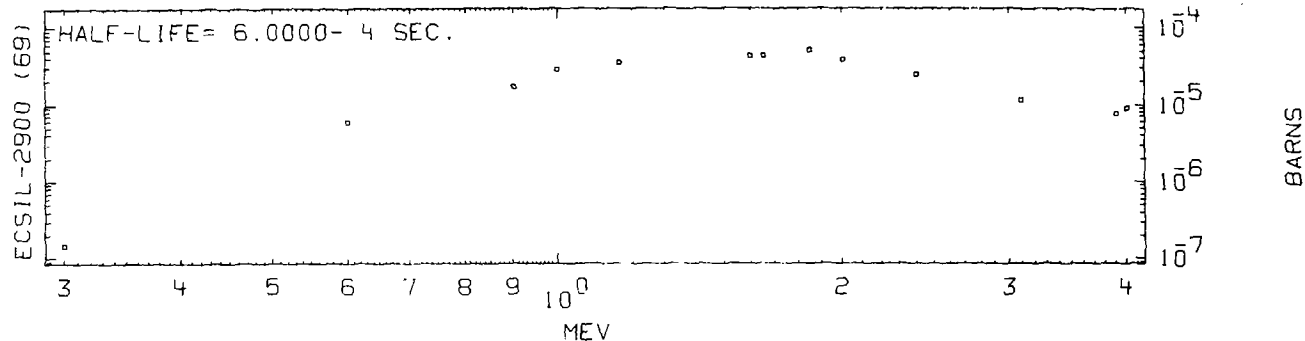
95-AM-243



03/01/74

N, GAMMA
CROSS SECTION

95-AM-243



03/01/74

FISSION

95-AM-243

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
67 1518	1.4500+ 1		2.1500+ 0	1.2000- 1
67 1518	1.4500+ 1		2.2900+ 0	1.2000- 1

03/01/74

N, GAMMA

95-AM-243

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
54 1474	2.5000- 8		1.1500+ 2	2.0000+ 1
57 1348	2.5000- 8		7.3600+ 1	1.8000+ 0

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA HALF-LIFE BARNs MINUTES
50 1476	2.5000- 8		5.0000+ 1	2.5000+ 1

03/01/74

FISSION
CROSS SECTION

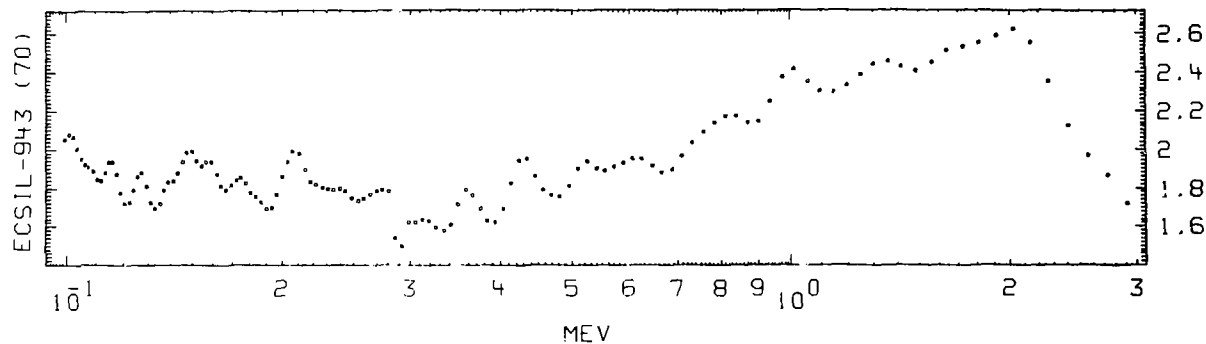
96-CM-242

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
67 1518	1.4500+ 1		0300+ 0	3.0000- 1

03/01/74

FISSION
CROSS SECTION

96-CM-243



03/01/74

PROMPT NEUTRONS/FISSION

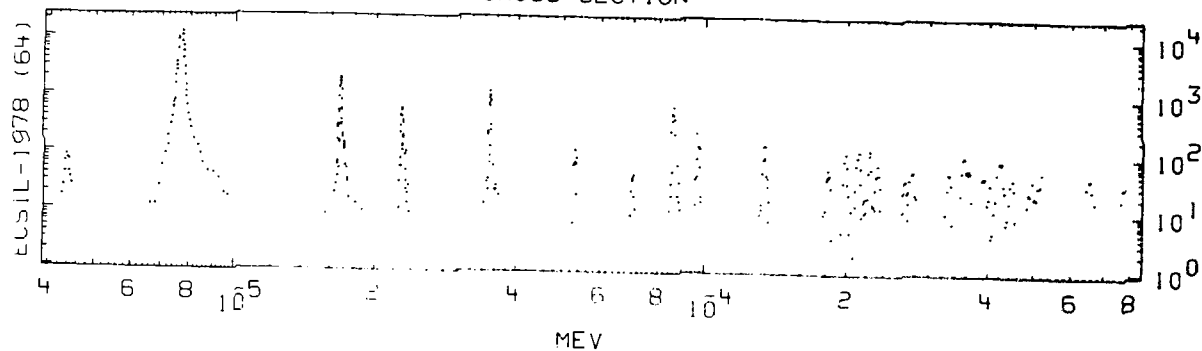
96-CM-243

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
69 1912	2.5300- 8		3.4300+ 0	4.7000- 2

03/01/74

TOTAL
CROSS SECTION

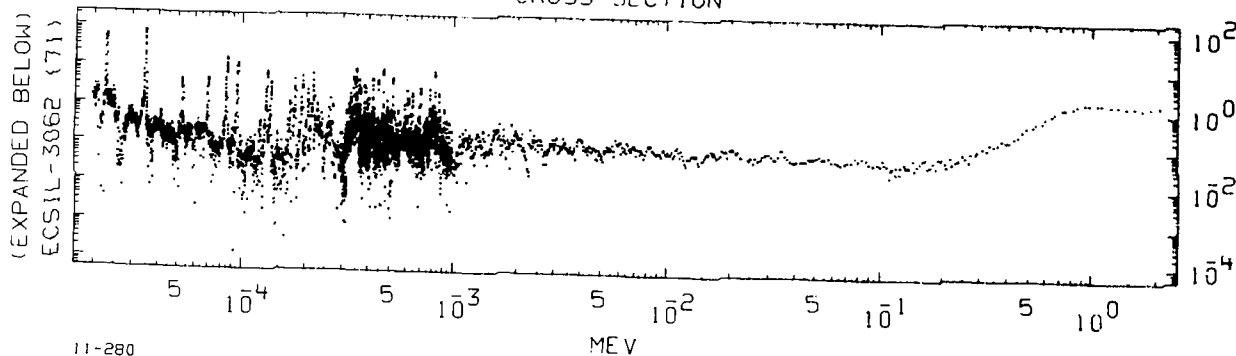
96-CM-244



03/01/74

FISSION
CROSS SECTION

96-CM-244



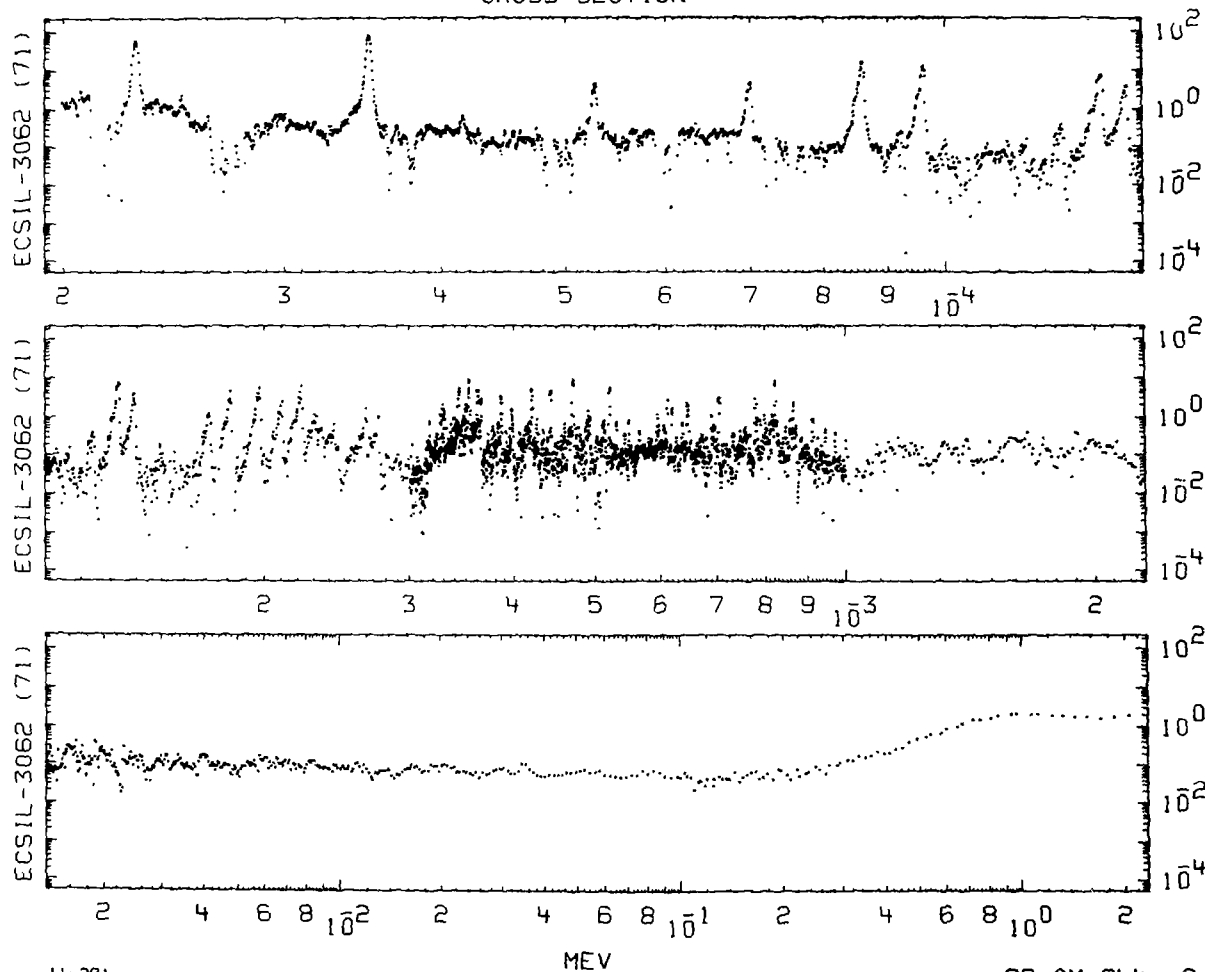
11-280

96-CM-244 -1

03/01/74

FISSION
CROSS SECTION

96-CM-244



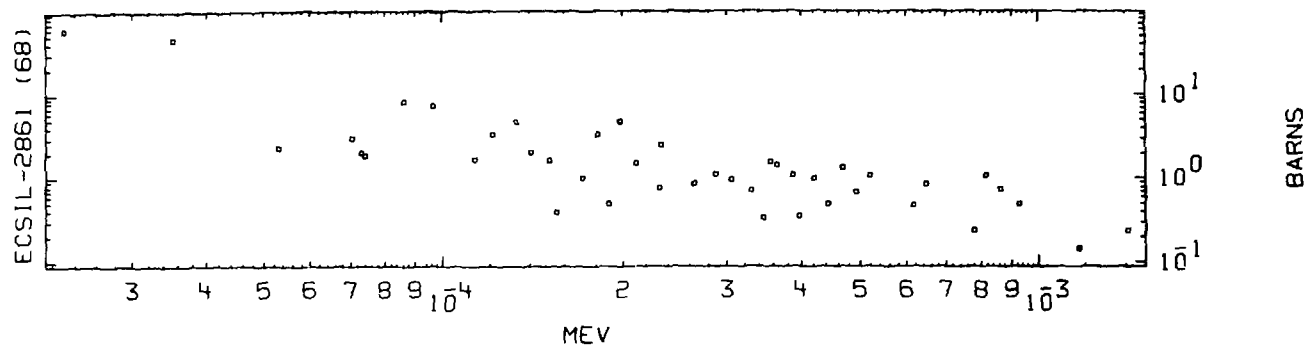
11-281

96-CM-244 -2

03/01/74

FISSION CROSS SECTION

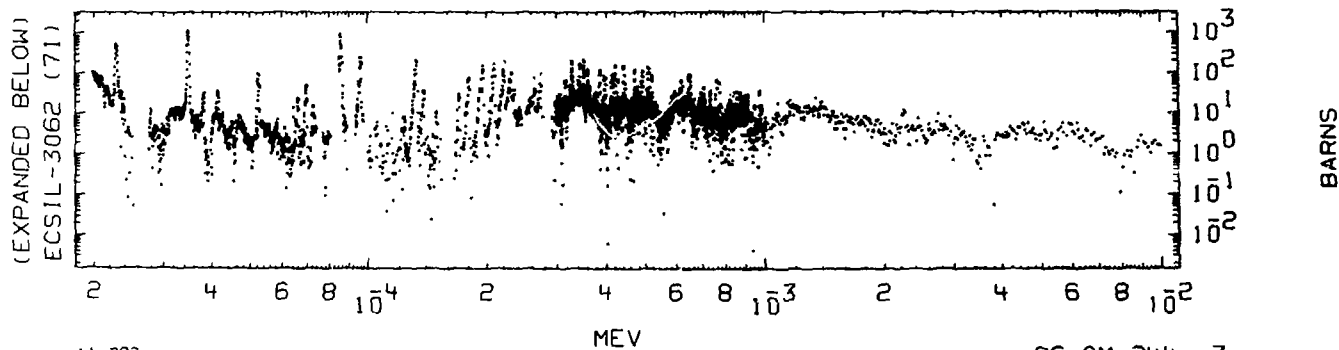
96-CM-244



03/01/74

N, GAMMA CROSS SECTION

96-CM-244



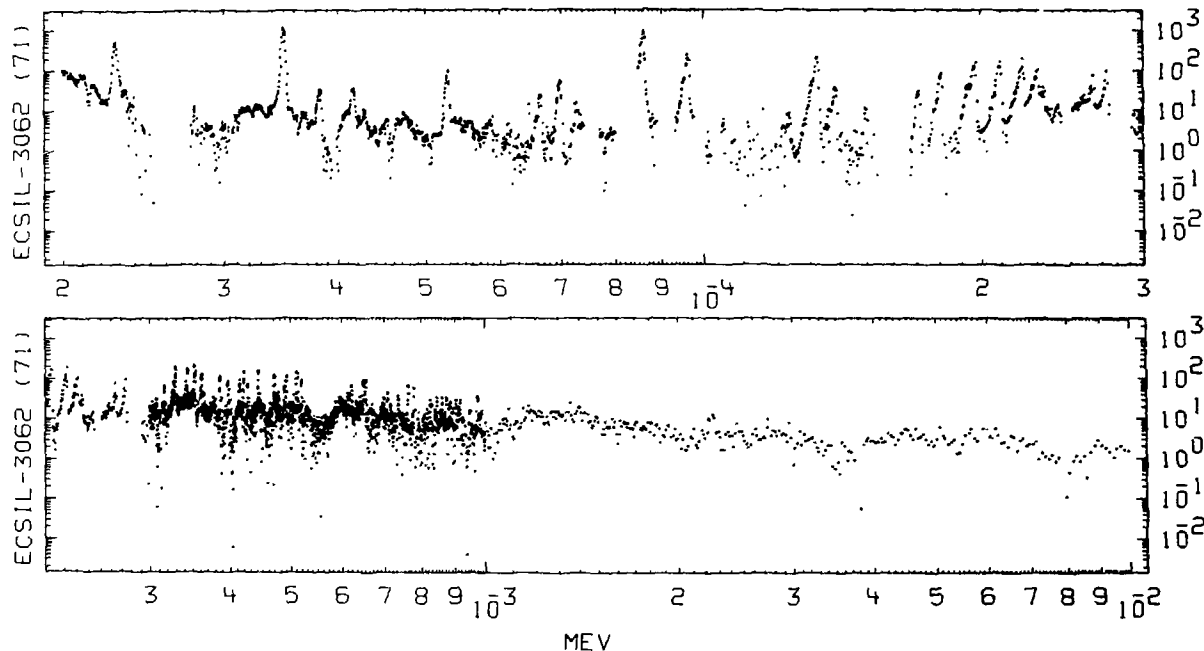
11-282

96-CM-244 -3

03/01/74

N. GAMMA
CROSS SECTION

96-CM-244



03/01/74

FISSION

96-CM-244

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARN	DELTA BARN
72 3232	2.5000- 2		1.1000+ 0	5.0000- 1	67 1518	1.4500+ 1		3.2800+ 0	3.0000- 1
1 69 2100	1.0000+ 0		1.7000+ 0		67 1518	1.4500+ 1		3.1000+ 0	3.0000- 1
1 69 2100	1.5000+ 0		1.7000+ 0		1 68 2100	1.4900+ 1		2.6000+ 0	
1 69 2100	3.0000+ 0		1.5600+ 0						

03/01/74

N, GAMMA
CROSS SECTION

96-CM-244

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
54 1474	2.5000- 8		2.5000+ 1	1.0000+ 1

03/01/74

CAPTURE/FISSION RATIO

96-CM-244

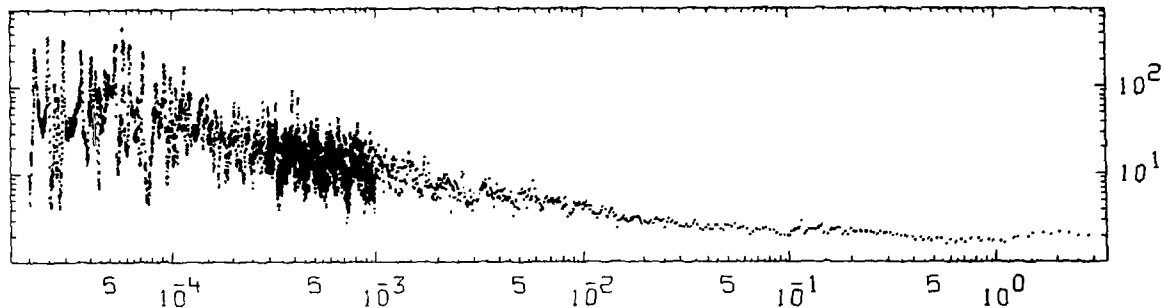
REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
68 2103	2.5300- 8		2.4000+ 1	

03/01/74

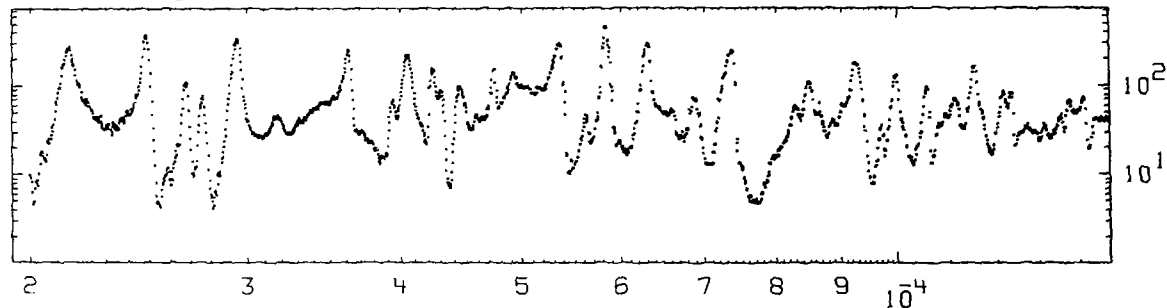
FISSION CROSS SECTION

96-CM-245

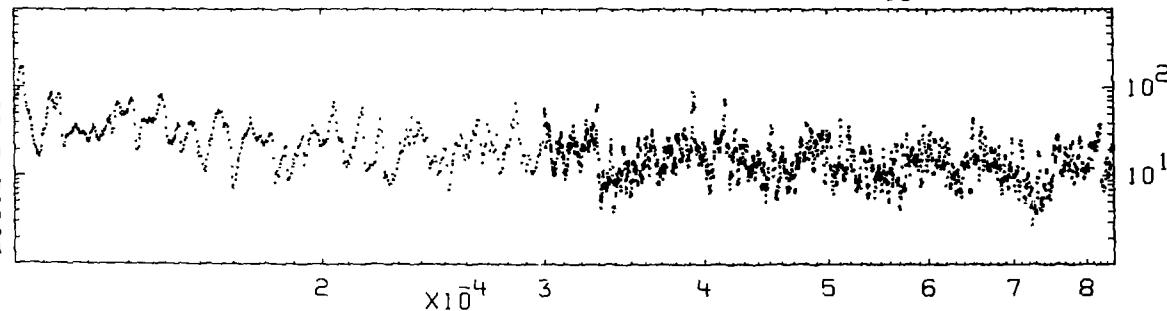
(EXPANDED BELOW)
ECSIL-3062 (71)



ECSIL-3062 (71)



ECSIL-3062 (71)



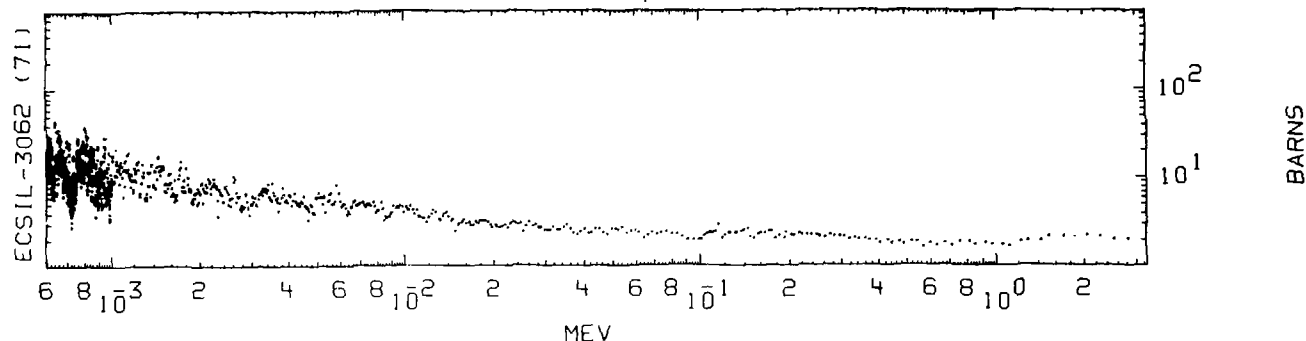
BARN

MEV

03/01/74

FISSION
CROSS SECTION

96-CM-245



03/01/74

FISSION

96-CM-245

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
1 70 3326	2.5000- 8		1.9200+ 3	1.8000+ 2	72 3232	2.5000- 2		2.0180+ 3	3.7000+ 1

03/01/74

N, GAMMA

96-CM-245

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs	REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
54 1474	2.5000- 8		2.0000+ 2	1.0000+ 2	1 69 3325	2.5000- 8		3.4000+ 2	2.0000+ 1

03/01/74

PROMPT NEUTRONS/FISSION

96-CM-245

REFERENCE	ENERGY MEV	DELTA MEV	NU-BAR	DELTA
69 1912	2.5300- 8		3.8320+ 0	3.4000- 2

03/01/74

CAPTURE/FISSION
RATIO

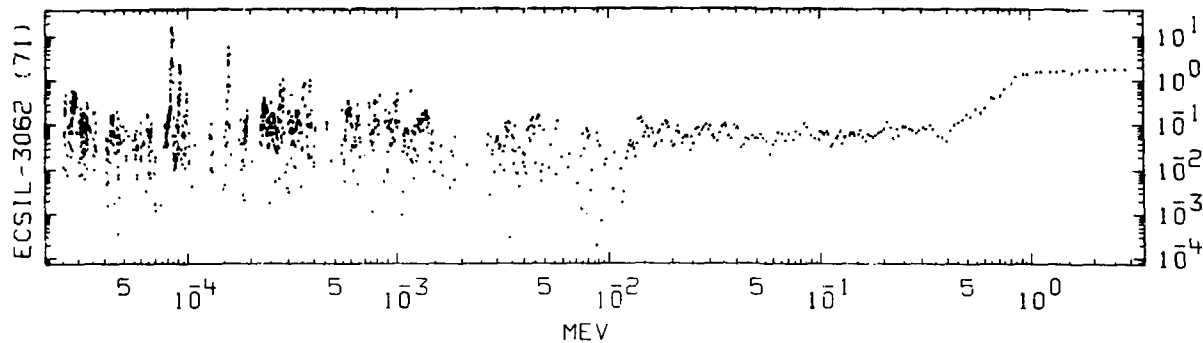
96-CM-245

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
68 2103	2.5300- 8		2.0000- 1	

03/01/74

FISSION
CROSS SECTION

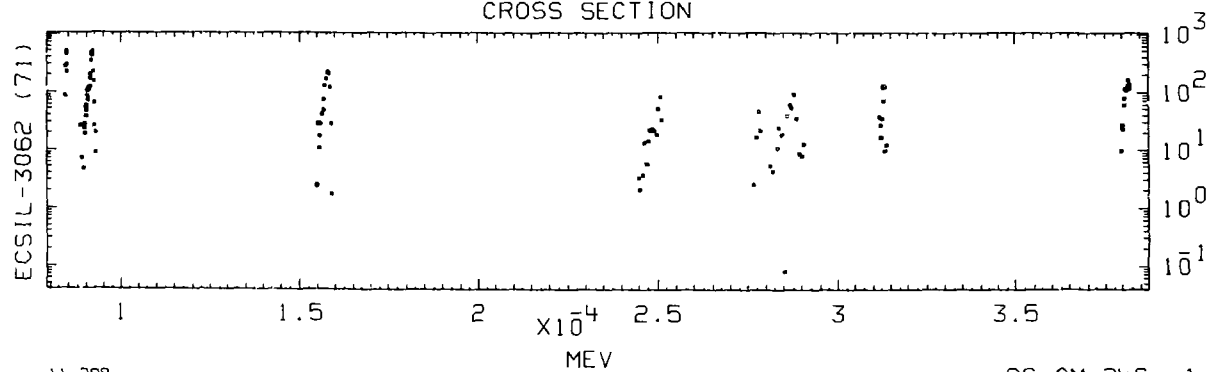
96-CM-246



03/01/74

N, GAMMA
CROSS SECTION

96-CM-246



11-288

96-CM-246 -1

03/01/74

FISSION
CROSS SECTION

96-CM-246

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
72 3232	2.5000- 2		1.7000- 1	1.0000- 1

03/01/74

N, GAMMA

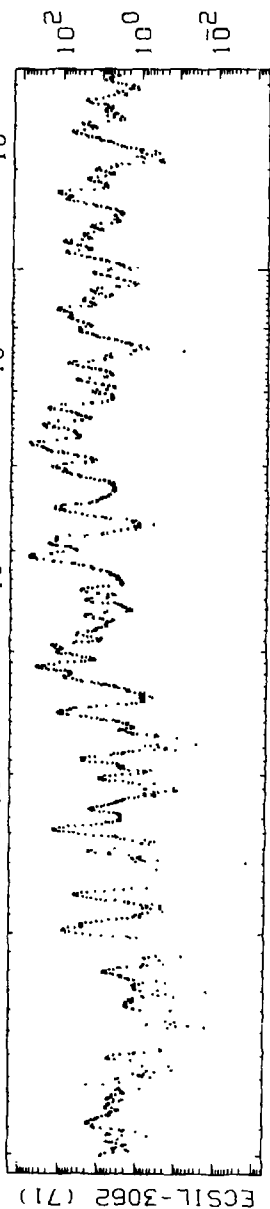
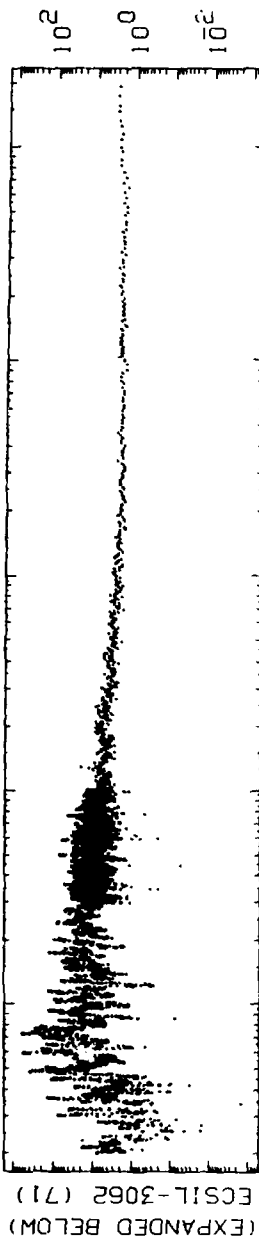
96-CM-246

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
54 1474	2.5000- 8		1.5000+ 1	1.0000+ 1
1 69 3325	2.5000- 8		1.2000+ 0	4.0000- 1

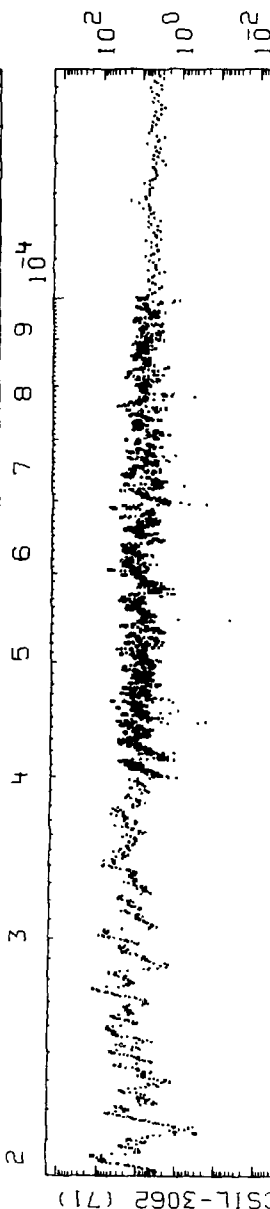
03/01/74

FISSION
CROSS SECTION

96-CM-247



BARNs



MEV

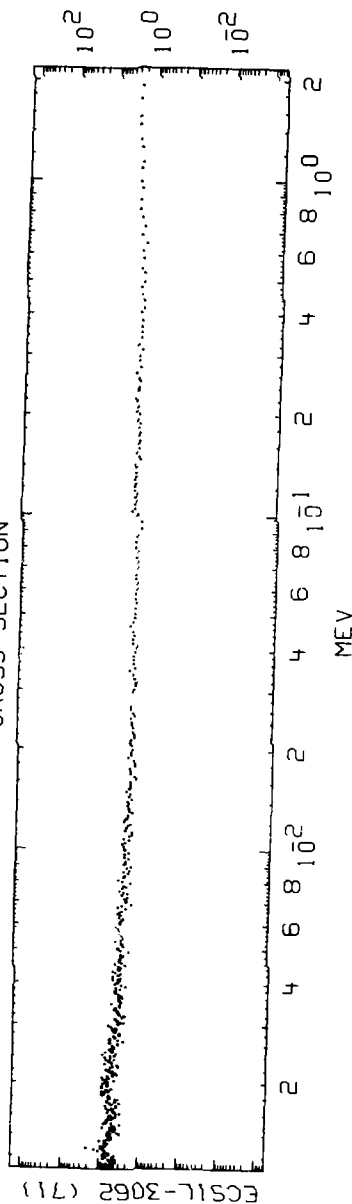
11-290

96-CM-247 -1

03/01/74

FISSION
CROSS SECTION

96-CM-247



03/01/74

FISSION

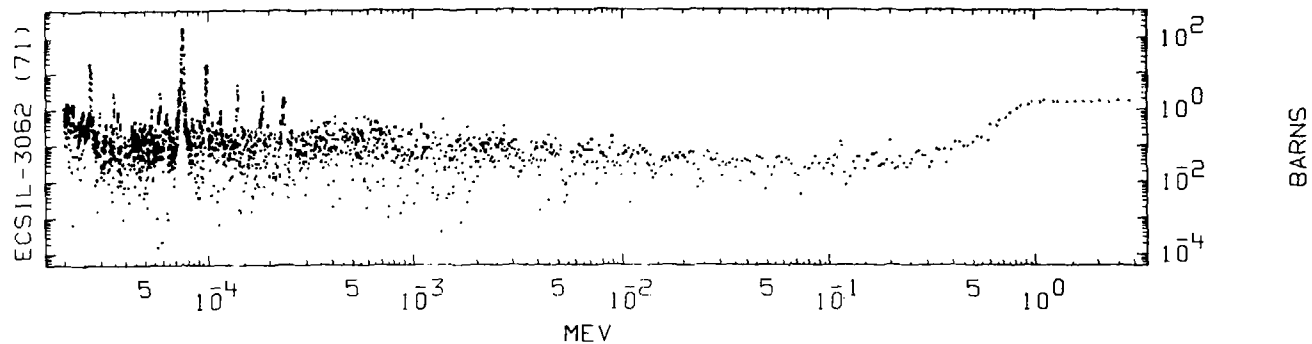
96-CM-247

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
1 70 3326	2.5000 - 8		1.2000+ 2	1.2000+ 1
72 3232	2.5000 - 2		8.2000+ 1	5.0000+ 0

03/01/74

FISSION CROSS SECTION

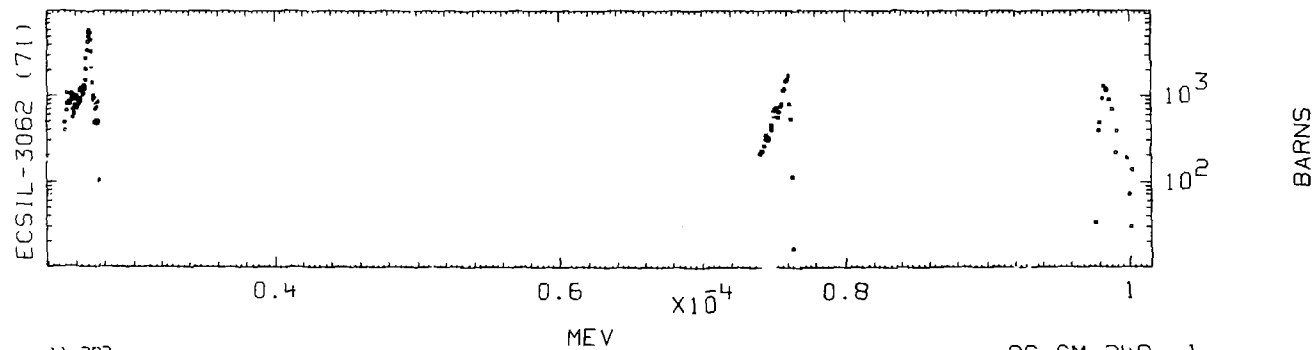
96-CM-248



03/01/74

N, GAMMA CROSS SECTION

96-CM-248



03/01/74

FISSION
CROSS SECTION

96-CM-248

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
72 3232	2.5000×10^{-2}		3.4000×10^{-1}	7.0000×10^{-2}

03/01/74

FISSION
CROSS SECTION

96-CM-249

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
72 3232	2.5000- 2		1.6600+ 3	5.0000+ 1

03/01/74

FISSION
CROSS SECTION

97-BK-249

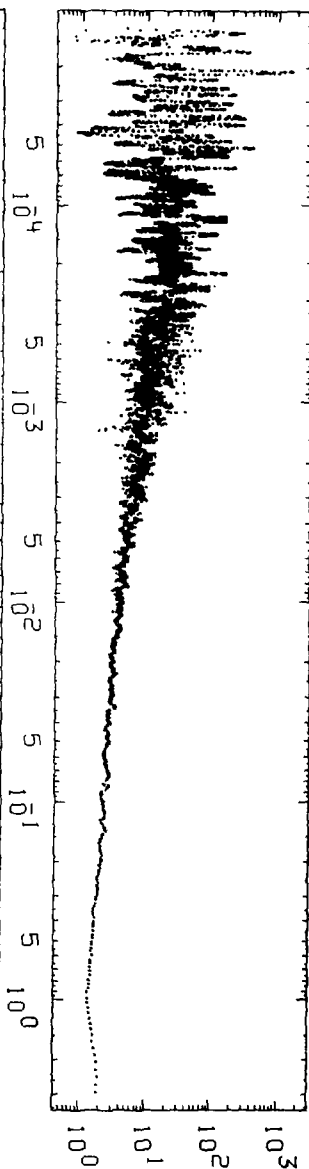
REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
69 2378	5.0000+ 0 5.0000- 2	1.3000+ 0 2.0000- 1		

03/01/74

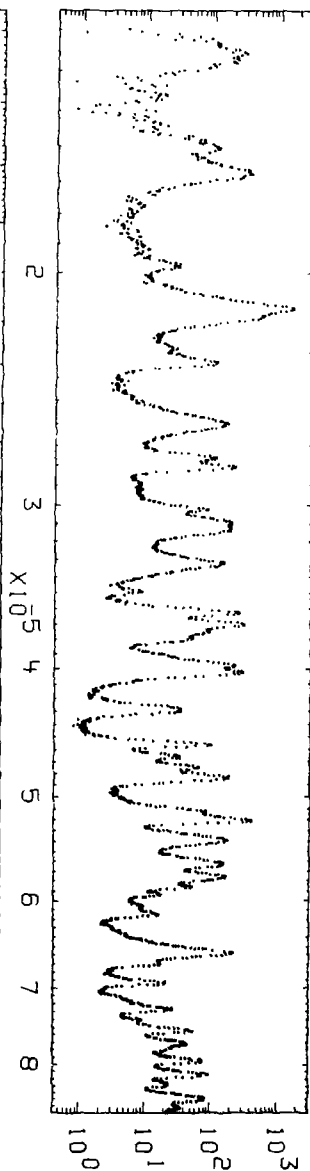
FISSION
CROSS SECTION

98-CF-249

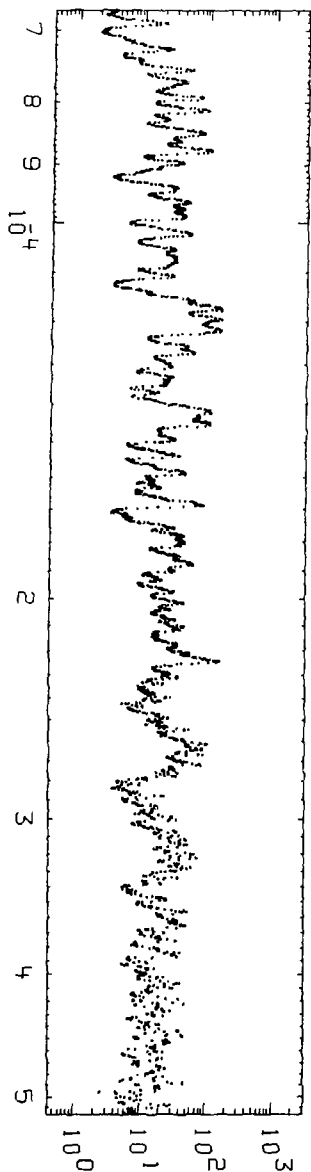
(EXPANDED BELOW)
ECSIL-3274 (72)



ECSIL-3274 (72)



ECSIL-3274 (72)



11-296

MEV

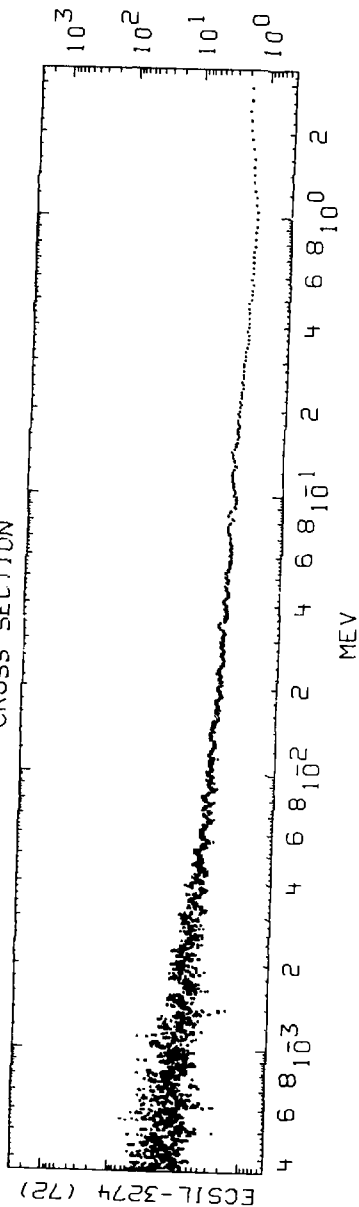
98-CF-249 -1

BARNs

03/01/74

FISSION
CROSS SECTION

98-CF-249



03/01/74

FISSION

98-CF-249

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
1 70	3325	2.5000 - 8	1.6900 + 3	1.6000 + 2
69	2378	5.0000 - 1	1.8000 + 0	3.0000 - 1

03/01/74

N, GAMMA

98-CF-249

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
1 71	3323	2.5000 - 8	4.7800 + 2	2.5000 + 1

03/01/74

N, GAMMA
CROSS SECTION

98-CF-250

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
1 71 3323	2.5000- 8		2.0300+ 3	2.0000+ 2

03/01/74

N, GAMMA
CROSS SECTION

98-CF-251

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
1 71 3323	2.5000- 8		2.8500+ 3	1.5000+ 2

03/01/74

CAPTURE/ FISSION RATIO

98-CF-251

REFERENCE	ENERGY MEV	DELTA MEV	RATIO	DELTA
68 2103	2.5300- 8		1.0000- 1	

03/01/74

N, GAMMA
CROSS SECTION

98-CF-252

REFERENCE	ENERGY MEV	DELTA MEV	X-SEC BARNs	DELTA BARNs
69 2102	2.5300- 8		2.0400+ 1	2.0000+ 0